

A partly annotated bibliography on

IDRC-135e

Infections, Parasites, and Diseases of African Wild Animals



Lars Karstad



The International Development Research Centre is a public corporation created by the Parliament of Canada in 1970 to support research designed to adapt science and technology to the needs of developing countries. The Centre's activity is concentrated in five sectors: agriculture, food and nutrition sciences; health sciences; information sciences; social sciences; and communications. IDRC is financed solely by the Government of Canada; its policies, however, are set by an international Board of Governors. The Centre's headquarters are in Ottawa, Canada. Regional offices are located in Africa, Asia, Latin America, and the Middle East.

© 1979 International Development Research Centre
Postal Address: Box 8500, Ottawa, Canada K1G 3H9
Head Office: 60 Queen Street, Ottawa, Canada

Karstad, L.

IDRC-135e

A partly annotated bibliography on infections, parasites, and diseases of African wild animals. Ottawa, Ont., IDRC, 1979, 111p.

/IDRC publication/. Annotated /bibliography/ on /animal disease/ including /infectious disease/ and /parasite/s occurring in /Africa/n wild /animal/s.

UDC: 016(6)591.2

ISBN: 0-88936-219-X

Microfiche edition available

**A Partly Annotated Bibliography on
Infections, Parasites, and Diseases of
African Wild Animals**

Lars Karstad

Wildlife Disease Section, Veterinary Research Laboratories, Kabete, Kenya

Contents

Foreword	3
Introduction.....	4
Common and Scientific Names of African Wild Animals.....	5
Bibliography	8
Subject Index	76

Foreword

Veterinarians have been interested in diseases of wild animals for nearly a century, ever since it was first recognized that such animals could act as carriers of diseases that affected domestic stock. This interest has been particularly active in Africa where large herds of domestic and wild ruminants graze together.

There are, however, many practical difficulties confronting the investigation of diseases in wild animals, and most of the work in this field has been carried out on a sporadic or intermittent basis. Thus, although a considerable volume of literature has accumulated that deals with the subject of infections, parasites, and diseases of African wild animals, it is widely dispersed and many references are located in reports and publications that are not readily accessible.

During the last decade there has been a renewed interest in diseases of African wildlife. Some of this interest relates to the attention currently being devoted to conservation. The role of wildlife is also featured in the development plans of a number of African countries that have recognized that wildlife represents an important tourist potential capable of generating a considerable inflow of foreign exchange. Some African countries are also attempting to improve the use of their range lands by using former communal grazing areas to create tribal or group ranches where more modern systems of livestock and range husbandry can be practiced.

In areas where livestock and wildlife hitherto grazed the same lands, the development of a ranching system with fenced areas creates important problems in terms of wildlife management and in this context the role of wildlife as disease carriers is of paramount importance.

Dr Lars Karstad, one of the best known wildlife disease specialists in North America, has lived in Africa for several years. His research interests have centred on studying the interrelationships between disease in domestic and wild animals. During the course of his work he has accumulated a large collection of literature on diseases of African wild animals.

This report is an indexed bibliography of the material in Dr Karstad's collection and dates to the end of 1978. It is hoped that it will be of value to others interested in diseases of wild animals and that readers will provide the author with additional material for preparing an even more comprehensive bibliography in the future.

Barry L. Nestel

*Consultant to the Agriculture, Food,
and Nutrition Sciences Division,
International Development Research Centre*

INTRODUCTION

This bibliography has been prepared as a working tool by the staff of the Wildlife Disease Section of the Veterinary Research Laboratories in Kabete, Kenya. Although it is still being developed, it is reproduced here for use by others engaged in wildlife research and management. It may be useful particularly to those who are concerned with the transmission of infections and parasites between wild and domestic animals. References on normal anatomy, physiology, and behaviour, and also on wildlife capture, management, and utilization, have been included when they have been judged useful for the disease investigator.

Readers will probably notice a number of omissions. As it is our intention to update this bibliography or to prepare addenda to it from time to time, all contributions of references will be gratefully received.

The material is presented in two parts: first a numbered alphabetical listing of references, and second a subject index. The indexing emphasizes specific subject categories, for example generic names rather than more general family or order groupings. Cross indexing has thereby been kept to a minimum. A nematode infection in an antelope is therefore listed under the genus name of the worm, also under the common name for the antelope, but not under "Parasite," "Helminth," "Antelope," "Artiodactyla," etc. Animals are indexed under their common English names. An alphabetical listing of these with the corresponding scientific names follows.

Common and Scientific Names of African Wild Animals

Aardvark	— <i>Orycteropus afer</i>
Aardwolf	— <i>Proteles cristatus</i>
Antelope, Hunter's	— <i>Damaliscus hunteri</i>
Antelope, roan	— <i>Hippotragus aquinus</i>
Antelope, sable	— <i>Hippotragus niger</i>
Baboon	— <i>Papio</i> spp.
Blesbuck (Blesbok)	— <i>Damaliscus dorcas</i>
Bongo	— <i>Boocercus euryceros</i>
Buffalo	— <i>Syncerus caffer</i>
Bushbuck	— <i>Tragelaphus scriptus</i>
Bushpig	— <i>Potamochoerus porcus</i>
Caracal	— <i>Lynx caracal</i>
Cheeta	— <i>Acinonyx jubatus</i>
Chimpanzee	— <i>Pan troglodytes</i>
Civet	— <i>Viverra civetta</i>
Cormorant	— family Phalacrocoracidae
Crane, crowned	— <i>Balearia regulorum</i>
Dik dik	— genera <i>Rhynchotragus</i> and <i>Madoqua</i>
Dog, hunting	— <i>Lycaon pictus</i>
Duiker	— genera <i>Cechalophus</i> and <i>Sylvicapra</i>
Eagle, fish	— <i>Cancuma vocifer</i>
Egret, cattle	— <i>Bubulcus ibis</i>
Eland	— <i>Taurotragus oryx</i>
Elephant	— <i>Loxodonta africana</i>
Flamingos	— family Phoenicopteridae
Fox, bat-eared	— <i>Otocyon megalotis</i>
Fox, fennec	— <i>Fennecus zerda</i>
Galago	— genera <i>Galago</i> , <i>Eneticus</i> and <i>Galagoides</i>

Gazelle	— genus <i>Gazella</i>
Gazelle, Grant's	— <i>Gazella granti</i>
Gazelle, Thomson's	— <i>Gazella thomsonii</i>
Gemsbok	— <i>Oryx gazella</i>
Genet	— genus <i>Genetta</i>
Gerbil	— genus <i>Gerbillus</i>
Gerenuk	— <i>Litoeranius walleri</i>
Giant forest hog	— <i>Hylochoerus meinertzhageni</i>
Giraffe	— <i>Giraffa camelopardalis</i>
Gnu (Wildebeest)	— <i>Connochaetes</i> spp.
Grysbuck	— genus <i>Raphicerus</i>
Hartebeest	— <i>Alcelaphus</i> spp.
Hedgehog	— family Erinaceidae
Hippopotamus	— <i>Hippopotamus amphibius</i>
Hyaena, spotted	— <i>Crocuta crocuta</i>
Hyaena, striped	— <i>Hyaena hyaena</i>
Hyrax	— family Procaviidae
Ibis	— family Threskiornithidae
Impala	— <i>Aepyceros melampus</i>
Jackal	— genus <i>Canis</i>
Klipspringer	— <i>Oreotragus oreotragus</i>
Kob	— <i>Kobus kob</i>
Kudu, greater	— <i>Tragelaphus strepsiceros</i>
Kudu, lesser	— <i>Tragelaphus imberbis</i>
Lechwe	— <i>Kobus leche</i>
Leopard	— <i>Panthera pardis</i>
Lion	— <i>Panthera leo</i>
Monkey, colobus	— <i>Colobus</i> spp.
Monkey, Brazza's	— <i>Cercopithecus neglectus</i>
Monkey, diana	— <i>Cercopithecus diana</i>
Monkey, vervet	— <i>Cercopithecus aethiops</i>
Monkey, Samango	— <i>Cercopithecus labiatus</i>
Mongoose	— genera <i>Ichneumia</i> , <i>Bdeogale</i> , <i>Rhynchogale</i> , <i>Atilax</i> , <i>Herpestes</i> , <i>Dologale</i> , <i>Helogale</i> , <i>Crossarchus</i> , <i>Mungos</i> , and <i>Paracynictis</i> , all within the family Viverridae
Nutria	— <i>Myocastor coypus</i>

Nyala	— <i>Tragelaphus angasi</i>
Oribi	— <i>Ourebia ourebi</i>
Oryx	— <i>Oryx</i> spp.
Ostrich	— <i>Struthio camelus</i>
Pangolin	— family Manidae
Rat, brown	— <i>Rattus norvegicus</i>
Reedbuck	— <i>Redunca</i> spp.
Rhebuck	— <i>Pelea capreolus</i>
Rhinoceros, black	— <i>Diceros bicornis</i>
Rhinoceros, white	— <i>Ceratotherium simum</i>
Shrew	— family Soricidae
Springbuck (Springbok)	— <i>Antidorcas marsupialis</i>
Squirrel	— family Sciuridae
Steinbuck (Steenbok)	— <i>Raphicerus campestris</i>
Stork, marabou	— <i>Leptoptilos crumeniferus</i>
Topi	— <i>Damaliscus korrigum</i>
Tsessebe	— <i>Damaliscus lunatus</i>
Vulture	— family Aegypiidae
Warthog	— <i>Phacochoerus aethiopicus</i>
Waterbuck	— <i>Kobus defassa</i> and <i>Kobus ellipsiprymnus</i>
Zebra	— <i>Equus</i> spp.

Bibliography

1. Abbot, C.W. 1973. Reactions of eland to immobilising drugs. Lammergeyer no. 18: 30-38.
2. Ables, E.D. and J. Ables. 1969. Field immobilization of free-ranging impala in Northern Kenya. E. Afr. Wildl. J. 7: 61-66.
3. Abrams, J.T. 1968. Fundamental approach to the nutrition of the captive wild herbivore. In: Comparative Nutrition of Wild Animals. Ed.: M.A. Crawford. Symp. Zool. Soc. London. No. 21 Academic Press, pp 44-62.
4. Alenacar Filho, R.A. 1972. Haematology of the eland. Studies on Comparative haematology. Arquivos do Institut Biologico 39: 213-228.
5. Alford, B.T., R.L. Burkhardt and W.P. Johnson. 1974. Etorphine and diprenorphine as immobilizing and reversing agents in captive and free-ranging mammals. J. Amer. Vet. Med. Ass. 164: 702-705.
6. Allen, J.R., D.H. Norback and I.C. Hsu. 1974. Tissue modifications in monkeys as related to absorption, distribution, and excretion of polychlorinated biphenyls. ARch. Environm. Cont. Toxicol. 2: 86-95.
7. Allsopp, R. 1971. The population dynamics and social biology of bushbuck (T. scriptus). MSc. thesis,, Univ. Nairobi.
8. Altmann, S.A. and J. Altmann. 1970. Baboon ecology. African field research. Bibliotheca primatologica no. 12 - S. Karger AG, Switzerland.
9. Amoroso, E.C., N.A. Hancock and L. Kellas. 1958. The foetal membranes and placenta of the hippopotamus (Hippopotamus amphibius (Linnaeus)). Proc. Zool. Soc. Lond. 130: 437-454.
10. Amoroso, E.C. and L.H. Matthews. 1958. Observations on placental structure in some ungulates. Mammalia 22: 175-184.
11. Amorose, E.C. and J.S. Perry. 1964. The foetal membranes and placenta of the African elephant (Loxodonta africana). Phil. Trans. Roy. Soc. Ser. B. 248: 1-34.
12. Anderson, E.C. et al. 1975. The pathogenicity of bovine strains of foot-and-mouth disease virus for impala and wildebeest. J. Wildl. Dis. 11: 248-255.
13. Anderson, I.G.H. 1976. Studies on the life cycle of the lung worm Pneumostrongylus calcaratus Monnig, 1932. J.S. Afr. Vet. Ass. 47: 23-27.
14. Anon. 1953. Rinderpest-buffalo-free zone, Uganda. Bull. Epiz. Dis. Afr. 1: 46.
2013 buffalo shot along the Uganda-Sudan Border 1949-1952. Not successful in establishing a buffalo-free zone.

15. Anon. 1953. The African rinderpest conference. Bull. Epiz. Dis. Afr. 1: 20-28.
16. Anon. 1955. Electric fencing against game: experiments in Tanganyika. Oryx 3: 138-143.
 "The Advisory Committee re-examines the project in the light of the present information on the incidence of rinderpest in East Africa, in view of the further evidence that where rinderpest has been eliminated from domestic livestock, wildlife no longer appears to constitute a source of infection and recommends that the project be abandoned."
17. Anon. 1957. Wildlife Rinderpest Survey Report. Inter-African Advisory Committee on Epizootic Diseases (IACED). Bull. Epiz. Dis. Afr. 5: 418.
18. Anon. 1962. The geographical distribution of the warthog and domestic pigs in Africa. Bull. Epiz. Dis. Afr. 10: 91-93.
 - includes maps of distribution of warthogs, domestic pigs and African swine fever.
19. Anon. 1964. Gestation period of impala. Afr. Wildl. 18: 162.
20. Anon. 1968. Veterinary research progress report No. 51. Dakar-Hann, Senegal. Bull. Epiz. Dis. Afr. 16: 528-531.
 - reports isolation of Trichinella spiralis from a jackal and 3 warthogs. Characteristics of the strain given. Cats and monkeys were highly susceptible.
21. Ansell, W.F.H. 1965. Feeding habits of Hippopotamus amphibius (Linn.). The Puku 3: 171.
22. Ansell, W.F.H. 1965. Measurements and weights of adult hippo from Zambia. The Puku 3: 181.
23. Appleby, E.C., O. Graham-Jones and S.A. Keeble. 1963. Primate diseases infectious to man. Vet. Rec. 75: 81.
 - B virus infection.
24. Arata, A.A. and N.G. Gratz. 1975. The structure of rodent faunas associated with arenaviral infections. Bull. World Health Organ. 52: 621-627.
25. Armstrong, G.G. 1965. An examination of the cemetum of the teeth of Bovidae with special reference to its use in age determination. M. Sc. thesis. Univ. of Alberta.
26. Aschaffenburg, R., M.E. Gregory, S.J. Rowland and S.Y. Thomson. 1961. The composition of the milk of the African black rhinoceros (Diceros bicornis, Linn.). Proc. Zool. Soc. Lond. 139: 259-263.
27. Aschaffenburg, R., M.E. Gregory, S.J. Rowland, S.Y. Thomson and V. Kon. 1962. The composition of the milk of the giraffe (Giraffa camelopardalis reticulata). Proc. Zool. Soc. Lond. 139: 259-263.
28. Ashcroft, M.T. 1958. An attempt to isolate Trypanosoma rhodesiense from wild animals. Trans. Roy. Soc. Trop. Med. Hyg. 52: 276-282.
29. Ashcroft, M.T. 1959. The importance of African Wild Animals as reservoirs of Trypanosomiasis. E. Afr. Med. J. 36: 289-297.
30. Ashcroft, M.T., Burt and H. Fairbairn. 1959. The experimental infection of some African wild animals with Tryp. rhodesiense, Tryp. brucei and Tryp. congolense. Ann. Trop. Med. Parasit. 53: 147-161.
31. Ashford, R.W. et al. 1976. Blood parasites of Ethiopian birds. 1. General survey. J. Wildl. Dis. 12: 409-426.

32. Ashton, D.G., D.M. Jones and J.S. Gilmour. 1977. Grass sickness in two non-domestic equines. Vet. Rec. 100: 406-407.
33. Asibey, E.O.A. 1974. Wildlife as a source of protein in Africa south of the Sahara. Biol. Conserv. 6: 32-39.
34. Atang, P.G. and W. Plowright. 1969. Extension of the JP15 rinderpest control campaign to Eastern Africa: the epizootiological background. Bull. Epiz. Dis. Afr. 17: 161-170.
35. Attwell, R.I.G. 1966. Oxpeckers, and their associations with mammals in Zambia. The Puku 4: 17-48.
36. Augustyn, N.J. and R.D. Bigalke. 1974. Anaplasma infection in a giraffe. J.S. Afr. Vet. Ass. 45: 229.
37. Austwick, P.K.C. 1968. Mycotic infections. Symp. Zool. Soc. Lond. No. 24: 249-271.
-cites others on Dermatophilus in zebra, giraffe and Thomson's gazelle.
38. Awan, M.A.Q. and J.S.S. Dillman. 1973. Trypanosoma brucei infection in a lion (Panthera leo) in Zambia. Trop. Anim. Health. Prod. 5: 75-78.
39. Baker, J.R. 1960. A trypanosome of Trypanosoma congolense group in African lion and leopard. Trans. Roy. Soc. Trop. Med. Hyg. 54: 2.
40. Baker, J.R. 1968. Trypanosomes of wild mammals in the neighbourhood of the Serengeti National Park. Symp. Zool. Soc. Lond. 24: 147-158.
41. Baker, J.R. and D.G. Lyon. 1977. Skull malformation and cerebellar herniation in captive African lions. Vet. Rec. 100: 154-156.
42. Baker, J.R., R. Sachs and J. Laufer. 1967. Trypanosomes of wild mammals in an area northwest of Serengeti National Park, Tanzania. Z. Tropenmed. Parasit. 18: 280-284.
43. Bull, M.G. 1966. Animal hosts of leptospirae in Kenya and Uganda. Amer. J. Trop. Med. Hyg. 15: 523-530.
- rodents and hippopotamus. Agglutinins demonstrated in sera of 5 of 64 hippopotamus.
44. Barnett, S.F. 1961. Parasites of game in relation to domestic stock.
Conference on Land Management problems in areas containing game: Lake Manyara Tanganyika. Part II, Reported from PEREIRA H.C. E.A.A.F.R.O. Muguga, Kenya. Reprinted from E.A.A.F.J. Vol. XXVII No. 2 Oct. 1961. Section V. The disease problems of wild animals in relation to domestic stock. Paper No. 18.
45. Barnett, S.F., and D.W. Brocklesby. 1966. The passage of Theileria lawrencei (Kenya) Through cattle. Brit. Vet. J. 122: 396-409.
46. Barnett, S.F. and D.W. Brocklesby. 1966. The susceptibility of the African buffalo (Syncerus caffer) to infection with Theileria parva (Theiler, 1904) Brit. Vet. J. 122: 379-386.
47. Barnett, S.F. and D.W. Brocklesby. 1968. Some piroplasms of wild mammals. Symp. Zool. Soc. Lond. 24: 159-176.
- Cytotautzoonoses, Echinozoon, Nuttalia, ECF in buffalo, Babesia of cats.

48. Bartels, H., P. Hilpert, K. Barbey, K. Betke, K. Riegel, E. Lang and J. Metcalfe. 1963. Respiratory functions of blood of the yak, lama, camel, Dybarski deer and african elephant. *Amer. J. Physiol.* 205: 331-336.
49. Bartsch, R.C., E.E. McConnel, G.D. Imes and J.M. Schmidt. 1977. A review of exertional rhabdomyolysis in wild and domestic animals and man. *Vet. Path.* 14: 314-324.
50. Barzilai, E. et al. 1971. Natural bluetongue infection in the mountain gazelle (Gazella gazella). *Refuah Vet.* 28: 93-97.
51. Barzilai, E. and A. Tadmor. 1972. Experimental infection of the mountain gazelle (Gazella gazella) with bluetongue virus. *Refuah Vet.* 29: 45-50.
52. Basson, P.A. 1962. Foot-and-mouth disease in game animals. *J.S. Afr. Vet. Med. Ass.* 33: 519.
53. Basson, P.A. 1962. Studies on specific oculovascular myiasis (uitpeuloog). I. Historical review. *Onderstepoort J. Vet. Res.* 29: 81-87.
54. Basson, P.A. 1962. Studies on specific oculovascular myiasis of domestic animals (Uitpeuloog). II. Experimental transmission. *Onderstepoort J. Vet. Res.* 29: 203-210.
55. Basson, P.A. 1962. Studies on specific oculovascular myiasis (uitpeuloog). III. Symptomatology, pathology, aetiology and epizootiology. *Onderstepoort J. Vet. Res.* 29: 211-240.
56. Basson, P.A. 1966. Gedoelstia myiasis in antelopes of Southern Africa. *Onderstepoort J. Vet. Res.* 33: 77-92.
57. Basson, P.A. 1969. Studies on specific oculovascular myiasis (Uitpeuloog) in sheep. V. Histopathology. *Onderstepoort J. Vet. Res.* 36:
58. Basson, P.A. et al. 1971. Disease conditions of game in Southern Africa. Recent miscellaneous findings. *Vet. Med. Rev.* 2/3: 313-340.
 - subjects: bot myiasis, mange, theileriosis, besnoitiosis, uterine coccidiosis, hepatozoonosis, cytauxzoonosis, klossielosis, necrobacillosis, brucellosis, elephant herpes, lumpy skin disease (Neethling type), capture myopathy, cutaneous papilloma in impala.
59. Basson, P.A., S.P. Kruger, R.M. McCully and J.W. Van Niekerk. 1966. Meningeal setariosis: Report on two cases in antelopes. *J.S. Afr. Vet. Med. Ass.* 37: 249.
60. Basson, P.A., R.M. McCully, R.D. Bigalke and J.W. Van Niekerk. 1967. Observations on a Hepatozoon-like parasite in the impala. *J.S. Afr. Vet. Med. Ass.* 38: 12.
61. Basson, P.A., R.M. McCully, S.P. Kruger, J.W. Van Niekerk, E. Young and V. de Vos. 1970. Parasitic and other diseases of the African buffalo in the Kruger National Park. *Onderstepoort J. Vet. Res.* 37: 11-28.
 - data on Theileria sp., granulomatous mycotic lymphadenitis, Sarcocystis, a squamous cell carcinoma, pentastomiasis, bilharziasis, cysticercosis, filariasis, hydatidosis, mange, Bensoitia were not found.
62. Basson, P.A., R.M. McCully, V. de Vos, E. Young and S.P. Kruger. 1971. Some parasitic and other natural diseases of the African elephant in the Kruger National Park. *Onderstepoort J. Vet. Res.* 38: 239-254.
 - data on a herpesvirus infection, granular vaginitis,

Dipetalonema causing eosinophilic hepatitis, Grammocephalus causing cholangitis, Parabronema causing gastric ulcers, focal disseminated cystitis of unknown cause, and aortic arteriosclerosis.

63. Basson, P.A., J.W. Niekerk, R.M. McCully and R.D. Bigalke. 1965. Besnoitiosis in South African antelopes: A preliminary note on the occurrence of Besnoitia cysts in the cardiovascular system. J.S. Afr. Vet. Med. Ass. 36: 578.
- in wildebeest.
64. Bauditz, R. 1972. Sedation, immobilization and anesthesia of zoo and wild animals with xylazine. Vet. Med. Nachrichten 3: 203-230.
65. Bauditz, R. 1972. Sedation, immobilization and anaesthesia with Rompun in captive and free-living wild animals. Vet. Med. Rev. 3/4: 204-225.
66. Bax, P.N. and D.L.W. Sheldrick. 1963. Some preliminary observations on the food of elephants in the Tsavo Royal National Park (East) of Kenya. E. Afr. Wildl. J. 1: 40-53.
67. Beck, C.C. 1976. Vetalar (Ketamine hydrochloride) a unique cataleptoid anesthetic agent for multispecies use. J. Zoo Anim. Med. 7: 11-38.
- data on gazelles, impala, cheeta, leopard, lion, serval cat, hyaena, civet, monkeys, baboons, porcupines, antbear, reptiles and birds.
68. Bellinge, W.H.S. and F.H. Woodley. 1964. Some notes on the rearing of young African elephants. E. Afr. Wildl. J. 2: 71-74.
69. Benedict, F.G. 1936. Physiology of the elephant. Carnegie Inst. Wash. D.C. Publ. 474, pp 302.
70. Bennett, G.F. and J. Blancou. 1974. A note on the blood parasites of some birds from the Republic of Madagascar. J. Wildl. Dis. 10: 239-240.
71. Bennett, G.F. and C.M. Herman. 1976. Blood parasites of some birds from Kenya, Tanzania and Zaire. J. Wildl. Dis. 12: 59-65.
72. Bennett, G.F. et al. 1974. Avian hematozoa of some Ugandan birds. J. Wildl. Dis. 10: 458-465.
73. Ben Shaul, D.M. 1963. The composition of the milk of wild animals. Int. Zoo Yb. 4: 333-342.
74. Benson, C.W. 1964. Birds associating with ungulates. Auk 81: 436.
75. Berger, M.E. 1970. The trapping and subsequent behaviour of baboons in Kenya. J. Wildl. Manage. 34: 817-820.
76. Berry, M.P.S. 1973. Game ranching in Natal. J.S. Afr. Wildl. Manage. Ass. 5: 33-37.
77. Bertram, B.C.R. 1976. Lion immobilization using phencyclidine (Sernylan). E. Afr. Wildl. J. 14: 233-235.
78. Bertram, B.C.R. 1975. Weights and measures of lions. E. Afr. Wildl. J. 13: 141-143.
79. Bertram, B.C.R. and J.M. King. 1976. Lion and leopard immobilization using Cl-744. E. Afr. Wildl. 14: 237-239.
80. Bigalke, R.C. 1963. A note on reproduction in the steenbok,

- Raphicerus campestris Thunberg. Ann. Cape Prov. Mus. 3: 64-67.
81. Bigalke, R.D. 1964. A description of some stages in the life cycle of an Eimeria sp. found in the impala Aepyceros melampus (Lichtenstein, 1812). J.S. Afr. Vet. Med. Ass. 35: 315-319.
 82. Bigalke, R.D. 1966. Coccidiosis in antelopes. Fauna and Flora, Pretoria 17: 38-41.
 83. Bigalke, R.D., E.E. Keep, P.J. Keep, and J.H. Schoeman. 1970. A large Babesia sp. and a Theileria-like piroplasm of the square-lipped rhinoceros. J.S. Afr. Vet. Med. Ass. 41: 292-294.
 84. Bigalke, R.D., M.E. Keep and J.H. Schoeman. 1972. Some protozoan parasites of Tragelaphine antelopes in South Africa with special reference to a Babesia sp. in a bushbuck and a Trypanosoma theileria-like parasite in a nyala. Onderstepoort J. Vet. Res. 39: 225-228.
 85. Bigalke, R.D., J.W. Van Niekerk, P.A. Basson and R.M. McCully. 1967. Studies on the relationship between Besnoitia of blue wildebeest and impala, and Besnoitia besnoiti of cattle. Onderstepoort J. Vet. Res. 34: 7.
 86. Bindernagel, J.A. 1972. Liver fluke Fasciola gigantica in African buffalo and antelopes in Uganda, East Africa. J. Wildl. Dis. 8: 315-339.
 87. Bindernagel, J.A. 1972. Thelazia rhodisiense (Nematode Spiruroidae) in African buffaloes in Uganda. J. Parasitol. 58: 594.
 88. Bisley, G.G. 1972. A case of intraocular myiasis in man due to the first stage larve of the Oestrid fly (Geddoelstia sp.) E. Afr. Med. J. 49: 768-771.
 89. Blackburn, J.T. 1973. Wild animals as a source of food. The State Vet. J. 28: 83, 101-127.
 90. Bligh, J. and A.M. Harthoorn. 1965. Continuous radio-telemetric records of the deep body temperature of some unrestrained African mammals under near-natural conditions. J. Physiol. 176: 145.
 91. Boever, W.J. 1977. Restraint of exotic animals. Mod. Vet. Pract. 58: 229-232.
 92. Boever, W.J., John Holden, Kent K. Kane. 1977. Use of telazol (Cl-744) for chemical restraint and anesthesia in wild and exotic carnivores. Vet. Med./Small Anim. Clin. November: 1722-1725.
- includes golden cat, lion, cheeta, leopard and fennec fox.
 93. Boever, W.J., S. Kennedy and K.K. Kane. 1977. Ossifying fibroma in a greater kudu. Vet. Med. Sm. Anim. Clin. 72: 1483-1486.
 94. Boever, W.J. and T. Kern. 1976. Papillomas in black and white colobus monkeys (Colobus polykomus). J. Wildl. Dis. 12: 180-181.
 95. Boever, W.J. and B. Kurka. 1974. Malignant, catarrhal fever in greater kudus. J. Amer. Vet. Med. Ass. 165: 817-819.
 96. Boyt, W. 1962. Trypanosomiasis in wild game. Department Report. Tsetse and Tryp. Control Branch, Salisbury. Mimeograph, 8pp.
 97. Bradley, R. 1972. A photographic ageing technique used on

- warthog. E. Afr. Wildl. J. 10: 123-128.
98. Branagan, D. 1966. Letter to the editor. Bull. Epiz. Dis. Afr. 14: 341-342.
- on behaviour of buffalo when infected with rinderpest.
 99. Branagan, D. and J.A. Hammond. 1965. Rinderpest in Tanganyika: A review. Bull. Epiz. Dis. Afr. 13: 225-246.
- much information on involvement of game.
 100. Breman, J.G., J.H. Nakano, E. Coffi, H. Godfrey and J.C. Gautun. 1977. Human poxvirus disease after smallpox eradication. Amer. J. Trop. Med. Hyg. 26: 273-281.
- "A 5-year-old boy living in a small camp in the rural Ivory Coast had a disease resembling smallpox. This occurred 4 years after smallpox had been eradicated from the Ivory Coast and 1.5 years after the last case of smallpox was detected in West and Central Africa. Clinical, serological, and epidemiological evidence indicated this disease was probably monkeypox, a poxvirus of the variola/vaccinia subgroup. A serologic survey of poxvirus antibodies in the wild animal population detected neutralizing antibodies in rodents, larger mammals, primates, and birds. The laboratory and ecological characteristics of poxviruses require further elucidation, especially those which have been found in animals near human monkeypox cases".
 101. Brocklesby, D.W. 1961. Cytauxzoon taurotragi, parasite of the eland. Trans. Roy. Soc. Trop. Med. Hyg. 55: 10.
 102. Brocklesby, D.W. 1962. Cytauxzoon taurotragi Martin and Brocklesby 1960, a piroplasm of the eland. Res. Vet. Sci. 3: 334-344.
 103. Brocklesby, D.W. 1964. Parasites of the Family Theileridae of the African buffalo occurring in East Africa. Thesis.
 104. Brocklesby, D.W. 1965. A new theilerial parasite of the African buffalo (Syncerus caffer). Bull. Epiz. Dis. Afr. 13: 325-330.
 105. Brocklesby, D.W. 1967. A Babesia species of the black rhinoceros. Vet. Rec. 80: 484.
 106. Brocklesby, D.W. and S.F. Barnett, 1966. The literature concerning Theileridae of the African buffalo. Brit. Vet. J. 122: 371-372.
 107. Brocklesby, D.W. and S.F. Barnett. 1966. The isolation of "Theileria lawrencei (Kenya)" from a wild buffalo (Syncerus caffer) and its serial passage through captive buffaloes. Brit. Vet. J. 122: 387-395.
 108. Brocklesby, D.W. and H. Campbell. 1963. A Babesia of the African elephant. E. Afr. Wildl. J. 1: 119.
 109. Brocklesby, D.W., H.K. Dennig and B.O. Vidler. 1965. A Babesia species of the leopard and its transmission to the domestic cat. Int. Congr. Protozool. 2: 177-178.
 110. Brocklesby, D.W. and Brenda O. Vidler. 1961. Haematozoa of the blue wildebeest. Bull. Epiz. Dis. Afr. 9: 245-249.
 111. Brocklesby, D.W. and B.O. Vidler. 1965. Some parasites of East African Wild animals. E.A. Wildl. J. 3: 120-122.
- among others, records Babesia spp. in jackals, hyaenas, leopards, lions, elephants, rhinoceros, zebra, reticulated giraffe but not in buffalo nor in any of the gazelles and antelopes.

112. Brocklesby, D.W. and B.O. Vidler. 1963. Some new host records for Hepatozoon species in Kenya. Vet. Rec. 75: 1265.
113. Brocklesby, D.W. and B.O. Vidler. 1966. Haematozoa found in wild members of the order Artiodactyla in East Africa. Bull. Epiz. Dis. Afr. 14: 285-299.
114. Brodey, R.S. et al. 1977. Spirocerca lupi in dogs in Vet. Parasitol. 3: 49-59.
 - 5/5 jackals infected, all with aortic lesions and esophageal granulomas.
 - 0/3 hyaenas infected.
115. Brooksby, J.B. 1968. Wild animals and the epizootiology of foot and mouth disease. Symp. Zool. Soc. Lond. 24: 1-11.
116. Brown, L. 1969. Wildlife v. sheep and cattle in Africa. Oryx 10: 29-101.
117. Budd, J. 1970. Distemper. In: Infectious Diseases of Wild Mammals. Ed. by J.W. Davis et al. Iowa State Univ. Press, Ames, pp. 36-49.
 - host list includes jackals, hunting dog, bat-eared fox, hyaena, civet and genet.
118. Burridge, M.J. 1975. The role of wild mammals in the epidemiology of bovine theilerioses in East Africa. J. Wildl. Dis. 11: 68-75.
 - Theileria lawrencei was transmitted from buffalo to cattle with Rhipicephalus appendiculatus but similar attempts to transmit the Theileria of wildebeest and eland failed. Anaplasma marginale was transmitted from wildebeest to splenectomized calves by blood inoculation.
119. Burridge, M.J. and C.D. Kimber. 1973. Serologic studies on Theileria gorgonis using the indirect fluorescent antibody test. Z. Tropenmed. Parasit. 24: 186-191.
120. Burridge, M.J., N.B. Pullan, H.W. Reid, R.W. Sutherst, and E.B. Wain. 1970. Survey of trypanosome infections in domestic cattle and wild animals in areas of East Africa. II. Salivarian trypanosome infections in wild animals in Busoga District, Uganda. Brit. Vet. J. 126: 627-633.
121. Bush, Mitchell, Randy Custer, Johanna Smeller, Lena May Bush, U.S. Seal and Robert Barton. 1978. The acid-base status of lions, Panthera leo, immobilized with four drug combinations. J. Wildl. Dis. 14: 102-109.
 - best results were achieved with a combination of tiletamine-zolazepam.
122. Bush, M., P.K. Ensley, K. Mehren and W. Rapley. 1976. Immobilization of giraffes with xylazine and etorphine hydrochloride. J. Amer. Vet. Med. Ass. 169: 884-885.
123. Buss, I.O. 1961. Some observations on food habits and behaviour of the African elephant. J. Wildl. Manage. 25: 131-148.
124. Buss, I.O. and A.C. Brooks. 1963. Observations on number, mortality and reproduction of elephants in Uganda pp. 117-122. In: Conservation of nature and natural resources in modern African States. IUCN Morges New Series Publ. No. 1, 367 pp.
125. Buss, I.O. and O.W. Johnson. Relationships of Leydig cell characteristics and intratesticular testosterone levels

- to sexual activity in the African elephant. *Anat. Rec.* 157: 191-196.
126. Buss, I.O. and N.S. Smith. 1966. Observations on reproduction and breeding behaviour of the African elephant. *J. Wildl. Manage.* 30: 375-388.
 127. Buss, I.O. and A. Wallner. 1965. Body temperature of the African elephant. *J. Mammal* 46: 107-108.
 128. Bustard, H.R. 1975. Captive breeding of crocodiles. In: *Breeding Endangered Species in Captivity*. Ed. R.D. Martin. Academic Press, New York. pp. 43-47.
 129. Buxton, P.A. 1955. The natural history of tsetse flies. London, Lewis.
 130. Bwangamoi, O. 1970. A check list of helminth parasites of animals in Tanzania. *Bull. Epiz. Dis. Afr.* 18: 229-242.
 131. Bwangamoi, O. 1970. Gazellostrongylus (Paracooperia) the cause of large nodules in the abomasum of gazelles in Kenya. *Bull. Epiz. Dis. Afr.* 18: 351-354.
 132. Cameron, C.M., R.C. Tustin and M.J.N. Meeser. 1963. Salmonella typhimurium infection in blue wildebeest calves (Connochaetes taurinus, BURCHELL) *J.S. Afr. Vet. Med. Ass.* 34: 53-55.
 133. Campbell, Heather and A.M. Harthoorn. 1963. The capture and anaesthesia of the African lion in his natural environment. *Vet. Rec.* 75: 275-276.
 134. Capel-Edwards, M. 1967. Foot-and-mouth disease in Myocastor coypus. *J. Comp. Path.* 77: 217-221.
 135. Capel-Edwards, M. 1970. Foot-and-mouth disease in the brown rat. *J. Comp. Path.* 80: 543-548.
 136. Carmichael, I.H. 1972. Helminthiasis in domestic and wild ruminants in Botswana - Preliminary investigation. *Trop. Anim. Health Prod.* 4: 175-181.
 137. Carmichael, J. 1934. Trypanosomes pathogenic to domestic stock and their effect in certain species of wild fauna in Uganda. *Ann. Trop. Med. Parasit.* 28: 41.
 138. Casebeer, R.L. and G.G. Koss. 1970. Food habits of wildebeest, zebra, hartebeest and cattle in Kenya Masailand. *E. Afr. Wildl. J.* 8: 25-36.
 139. Casebeer, R.L. and R.N. Deane. 1967. Wildlife competition with cattle in Kenya. FAO, Rome. FO AFC/WL-67-12..
 140. Chalmers, A.W. and G.R. Scott. 1969. Ecology of rabies. *Trop. Anim. Health Prod.* 1: 33-35.
 141. Chalmers, G. 1963. Breeding data: steenbok. *E. Afr. Wildl. J.* 1: 121-122.
 142. Chalmers, G.A. and M.W. Barrett. 1977. Capture myopathy in pronghorns in Alberta, Canada. *J. Amer. Vet. Med. Ass.* 171: 918-923.
- refers also to the problem in African wildlife and discusses pathogenesis.
 143. Chana, T.S. 1975. Muscle cysticercosis in wildebeest in Kajiado District of Kenya. *Bull. Anim. Health Pro.* 23: 87-93.

144. Cheke, R.A. 1971. A note on some blood parasites from Ghanaian birds. *Rev. Zool. Bot. Afr.* 84: 97-98.
- Plasmodium, Haemoproteus and microfilaria.
145. Cheke, R.A. 1972. Birds of the Cherangani montane forests and their parasites. *E. Afr. Wildl. J.* 10: 245-249.
- Deals with haematozoa, feather mites and lice.
146. Cheke, R.A. 1978. Records of birds and their parasites from the Charangani Mountains, Kenya. *E. Afr. Wildl. J.* 16: 61-64.
- information on feather mites.
147. Child, G. 1964. Growth and ageing criteria of impala, Aepyceros melampus. *Occas. Papers. Nat. Mus. S. Rhod.* 4 (27b): 128-135.
148. Child, G. 1965. Additional records of abnormal dentition in impala. *Mammalia* 29: 622.
149. Child, G. 1969. The incidence of abnormal tooth formulae in two impala populations. *Mammalia* 33: 541-543.
150. Child, G. 1970. Wildlife utilization and management in Botswana. *Biol. Conserv.* 3: 18-22.
151. Child, G., L. Sows and B.L. Mitchell. 1965. Variations in the dentition, ageing criteria and growth patterns in warthog. *Arnoldia* 1: 1-23.
152. Child, G. and V.J. Wilson. 1964. Delayed effects of tsetse control hunting on a duiker population. *J. Wildl. Manage.* 28: 866-868.
153. Child, G. and V.J. Wilson. 1964. Observations on ecology and behaviour of roan and sable in three tsetse control areas. *Arnoldia*, 1: 1-8.
154. Choquette, L.P.E. 1970. Anthrax. In: *Infectious Diseases of Wild Mammals*. Ed. J.W. Davis et al. Iowa State Univ. Press, Ames, pp. 256-266.
- includes records of anthrax in wildlife in Africa.
155. Christoph, H.J. and G. Schube. 1964. Haematology in zoo animals VIII Blood picture in pelicans. *Kleintier-Praxis* 9: 18-22.
156. Clarke, J.E. 1964. Game elimination as means of tsetse control with special reference to host preferences. *The Puku. Occ. Papers Dept. Game and Fisheries, N. Rhodesia*, no. 2: 67-75.
157. Clough, G. 1969. Some preliminary observations on reproduction in the warthog, Phacochoerus aethiopicus Pallas. *J. Repro. Fert. Suppl.* 6: 323-337.
158. Coatney, G.R. et al. 1971. The primate malarias. 366 pages. U.S. Dept. Health. U.S. Govt. Printing Off., Washington, D.C.
159. Collinge, C.A. et al. 1974. A mycological study of Arthroderma benhamiae from the Central African hedgehog. *Sabouraudia* 12: 227-232.
160. Condry, J.B. 1969. Foot-and-mouth disease of wildlife in Rhodesia and other African territories. *J. Comp. Path.* 79: 27-31.
161. Condry, J.B. 1972. Observations on levels of internal parasites in free living Rhodesian wildlife. I. kudu

(Tragelaphus strepsiceros (Pallas 1766). Zool. Afr. 7: 413-418.

162. Condry, J.B. and R.S. Hedger. 1974. The survival of foot-and-mouth diseases virus in African buffalo with non-transference to domestic cattle. Res. Vet. Sci. 16: 182-185.
163. Condry, J.B. and R.R. Hill. 1970. Filariasis in Rhodesian wild life. Centr. Afr. J. Med. 16: 249-251.
164. Condry J.B. and D.B. Vickers. 1969. The isolation of Brucella abortus from a waterbuck (Kobus ellipsiprymnus). Vet. Rec. Aug. 16: 200.
165. Condry J.B. and D.B. Vickers. 1976. Brucellosis in buffalo (Syncerus caffer) in Wankie National Park. Rhod. Vet. J. 7: 58-60.
166. Cooper, A.C.D. 1972. Some haematological values in five species of game. J.S. Afr. Vet. Med. Ass. 43: 169-174.
167. Cooper, A.C.D. and I.H. Carmichael. 1974. The incidence of brucellosis in game in Botswana. Bull. Epiz. Dis. Afr. 22: 119-124.
168. Cooper, J.E. 1971. Disease in East African snakes associated with Kalichephalus worms (Nematoda: Diaphanoccephalidae). Vet. Rec. 89: 385-388.
169. Cooper, J.E. 1972. Some haematological data for birds of prey. Raptor Res. 6: 133-136.
170. Cooper, J.E. 1973. Post-mortem findings in East African birds of prey. J. Wildl. Dis. 9: 368-375.
171. Cooper, J.E. 1973. Use of the drug metomidate to facilitate the handling of vultures. J. Zoo. Anim. Med. 4: 4-6.
172. Cooper, J.E. 1974. Ketamine hydrochloride as an anaesthetic for East African reptiles. Vet. Rec. July 13: 37-41.
173. Cooper, J.E. 1974. Metomidate anaesthesia of some birds of prey for laparatomy and sexing. Vet. Rec. 94: 437-440.
174. Cooper, J.E. 1975. Haematological investigations in East African birds of prey. J. Wildl. Dis. 11: 389-394.
175. Cooper, J.E. and L. Frank. 1973. Use of the steroid anaesthetic CT 1341 in birds. Vet. Rec. May 5: 474-479.
176. Cooper, J.E. and D.C. Houston. 1972. Lesions in the crop of vultures associated with bot fly larvae. Trans. Roy. Soc. Trop. Med. Hyg. 66: 515-516.
177. Cooper, J.E. et al. 1975. Tuberculosis in lesser flamingoes in Kenya. J. Wildl. Dis. 11: 32-36.
- Mycobacterium avium type 1.
178. Corson, J.F. 1932. A note on susceptibility of some birds and wild animals to infection with Trypanosoma rhodesiense. J. Trop. Med. Hyg. 35: 123.
179. Corson, J.F. 1934. The cerebrospinal fluid of some small antelopes infected with Trypanosoma rhodesiense. Ann. Trop. Med. Parasit. 28: 243.
180. Corson, J.F. 1936. A second note on a high rate of infection on the salivary glands of Glossina morsitans

- after feeding on a reedbuck infected with Trypanosoma rhodesiense. Trans. R. Soc. Trop. Med. Hyg. 30: 207.
181. Corson, J.F. 1937. The cerebrospinal fluid of monkeys (Cercopithecus sp.) infected with a strain of Trypanosoma rhodesiense. Ann. Trop. Med. Parasitol. 32: 197.
 182. Corson, J.F. 1939. The infections produced in sheep and antelopes by a strain of Trypanosoma rhodesiense. Trans. R. Soc. Trop. Med. Hyg. 33: 37.
 183. Crawford, M.A., J.M. Patterson and L. Yardley. 1968. Nitrogen utilization by the Cape buffalo (Syncerus caffer) and other large mammals. In: Comparative Nutrition of Wild Mammals. Ed.: M.A. Crawford. Symp. Zool. Soc. London. No. 21. Academic Press. pp. 367-379.
 184. Cunnigham, M.P. 1968. Trypanosomiasis in African wild animals. E. Afr. Agr. Forest. J. 33: 264-265.
 185. Curson, H.H. 1928. Nagana in Zululand. 13th and 14th rep. Dir. Vet. Educ. Res., U. of S. Africa. pp. 309-414.
 186. Dade, Albert W., Jeffrey F. Williams, Allan L. Trapp, and William H. Ball, Jr. 1977. Cerebral nematodiasis in captive nutria. J. Amer. Vet. Med. Ass. 171: 885-886.
 187. Dagg, A.I. 1962. Giraffe movement and the neck. Nat. Hist. 71: 45-51.
 188. Dagg, A.I. 1962. The role of the neck in the movements of the giraffe. J. Mammal. 43: 88-87.
 189. Dart, R.A. 1963. The carnivorous propensity of baboons. Symp. Zool. Soc. Lond. 10: 49-56.
 190. Dassmann, R.F. and A.S. Mossman. 1966. Commercial utilization of game mammals on a Rhodesian ranch. FAO, Rome. AM/MISC/66/7.
 191. Daubney, R. and J.R. Hudson. 1933. Rift Valley Fever. Lancet 222: 611-612.
- reports susceptibility of African buffalo.
 192. Davel, C.J.A. 1965. Baboon kills and eats steenbuck. Afr. Wildl. 19: 114-115.
 193. Davies, F.G. 1975. Observations on the epidemiology of Rift Valley Fever in Kenya. J. Hyg. (Camb.) 75: 219-230.
- Low prevalence of antibodies were found in wildebeest, hartebeest, Thomson's and Grant's gazelles and waterbuck. Unsuccessful attempts were made to isolate virus from spleen tissues of 110 rodents.
 194. Davies, F.G. 1976. Characteristics of a virus causing a pox disease in sheep and goats in Kenya, with observations on the epidemiology and control. J. Hyg., Camb. 76: 163-171.
 195. Davies, F.D. and S. Otieno. 1977. Elephants and zebras as possible reservoir hosts for African horse sickness virus. Vet. Rec. 100: 291-292.
 196. Davies, F.G., T. Shaw and P. Ochieng. 1975. Observations on the epidemiology of ephemeral fever in Kenya. J. Hyg., Camb. 75: 231-235.
 197. Davies, F.G., I. Solberg and A.R. Walker. 1976. Viral isolates from Ixodid ticks. Arthropod-borne Virus

Information Exchange 30: 77.

- many of the ticks were taken from wild ungulates.

198. Davies, F.G. and A.R. Walker. 1974. The distribution in Kenya of bluetongue virus and antibody and the *Culicoides* vector. *J. Hyg., Camb.* 72: 265-272.
199. Davies, F.G. et al. 1972. The pathogenicity of Rift Valley Fever Virus for the baboon. *Trans. Roy. Soc. Trop. Med. Hyg.* 66: 363.
200. Davis, D.H.S. 1953. Plague in South Africa: A study of the epizootic cycle in gerbils (*Tatera brantsi*) in the Northern Orange Free State. *J. Hyg. Camb.* 51: 427-449.
201. Debbie, J.G. 1970. Wildlife disease research. FAO, Rome. TA 2834.
202. Debbie, J.G. and B. Clausen. 1975. Some haematological values of free ranging African elephants (*Loxodonta africana*). *J. Wildl. Dis.* 11: 79-82.
203. De Boom, H.P.A. 1953. The identification of biltong. *Fauna and Flora (Pretoria)* 3: 3-21.
- includes information on hairs.
204. De Boom, H.P.A. and J.H. Dreyer. 1953. The possibility of identifying hair from South African game for forensic purposes* *S. Afr. J. Sci.* 1953: 233-234.
205. Decker, R.A., T.L. Randall and J.W. Prideaux. 1975. Enterolithiasis in a confined Hartman's mountain zebra. *J. Wildl. Dis.* 11: 357-360.
206. Dempsey, W.W. 1969. Comparative aspects of the placentae of African mammals. *J. Reprod. Fert. Supp.* No. 6: 189-192.
207. Denney, R.N. 1968. The case for intensive wildlife management. *E. Afr. Agri. Forest. J.* 33: 118-132.
208. Denney, R.N. 1969. Black rhinoceros immobilization utilizing a new tranquilizing agent. *E. Afr. Wildl. J.* 7: 159-165.
209. Denney, R.N. 1970. Body temperatures of some wild East African ungulates. *E. Afr. Wildl. J.* 8: 212-216.
- data on hartebeest, wildebeest, zebra, eland, rhinoceros, elephant, oryx. Drug immobilization induced up to 2C increases over temperature of shot animals.
210. Denney, R.N. 1972. Relationship of wildlife to livestock on some developed ranches on the Laikipia Plateau, Kenya. *J. Range Manage.* 25: 415-425.
211. Dennig, H.K. 1965. The isolation of *Babesia* species from wild animals. *Int. Congr. Parasitol.* (Rome, 1964) 1: 262-263.
- Grevy's zebra and common zebra as hosts for *B. equi*. Successful treatment with Berenil.
- jackal, host for *B. canis*.
212. Dennig, H.K. and D.W. Brocklesby. 1972. *Babesia pantherae* sp. nov., a piroplasm of the leopard (*Panthera pardus*). *Parasitology* 64: 525-532.
213. Densham, W.D. 1974. A method of capture and translocation of wild herbivores using opaque plastic material and a helicopter. *The Lammergeyer* 21: 1-25.

214. Dosowitz, R.S. 1960. Studies on immunity and host-parasite relationships. II The Immune response of antelope to Trypanosoma challenge. Ann. Trop. Med. Parasitol. 54: 281-292.
 - Gazella rufifrons
 - Redunca redunca
 - Sylvicapra grimmia
215. De Vos, V. and G.D. Imes. 1976. An outbreak of dermatophilosis in the sable (Hippotragus niger) and roan (Hippotragus equinus in the Kruger National Park). Koedoe 19: 1-15.
216. De Vos, V. and C.A.W.J. Van Niekerk. 1969. Brucellosis in the Kruger National Park. J.S. Afr. Vet. Med. Ass. 40: 331.
217. Dieterich, R.A., J.G. Grootenhuys, R.O. Olubayo and R.W. Paling. 1975. Wildlife Disease Research. FAO Project Working Paper. FAO, Rome. D.P./KEN/68/013.
218. Dillmann, J.S.S. 1976. Compiled final report. Veterinary Wildlife Research Section. Dept. Vet. Services, Zambia. Vols. 1 & 2.
 - Volume 1 deals with elephant cropping, immobilization of black rhinoceros, a specific eye lesion in hippopotamus, tick identifications, foot-and-mouth disease studies in lechwe and buffalo, game meat utilization and abattoirs, trypanosomiasis in lion, T. brucei in hippopotamus, arteriosclerosis in elephant, and tuberculosis in lechwe.
 - Volume 2 contains information on Dermatophilus in cattle, haematology of game animals and tuberculosis in lechwe.
219. Dillmann, J.S.S. and M.A.Q. Awan. 1972. Polymorphic trypanosome infection in a lion. Ann. Trop. Med. Parasitol. 66: 421-422.
220. Dillmann, J.S.S. and M.A.Q. Awan. 1972. The isolation of Trypanosoma brucei from Hippopotamus amphibius in the Luangwa Valley, Zambia. Trop. Anim. Health Prod. 4: 135-137.
221. Dillmann, J.S.S. and W.R. Carr. 1970. Observations on arteriosclerosis, serum cholesterol and serum electrolytes in the wild African elephant (Loxodonta africana). J. Comp. Path. 80: 81-87.
222. Dilworth, T.G. and J.A. McKenzie. 1970. Attempts to identify meat of game animals by starch-gel electrophoresis. J. Wildl. Manage. 34: 917-921.
223. Dinnes, M.R. 1972. Medical aspects of an ostrich breeding programme. Int. Zoo Yearbook 12: 223-224.
224. Dinnik, J.A. 1963. On Moneizia monardi Fuhrmann and Avitellina buechneri sp. nov. from Adenota kob. J. Helminth. 37: 196.
225. Dinnik, J.A. and R. Sachs. 1968. A gigantic Protostrongylus, P. africanus sp. nov., and other lung nematodes of antelopes in the Serengeti, Tanzania. Parasitol. 58: 819-829.
 - no lung lesions in 15 buffalo, 12 eland, 3 giraffe, 12 waterbuck and 6 dik-dik.
 - P. africanus found in topi, hartebeest, wildebeest and rarely in impala and T. gazelle.
 - pathology - see Moulton and Sachs, 1970. Pathology is described here as well, briefly.

226. Dinnik, J.A. and R. Sachs. 1969. Cysticercosis, echinococcosis and sparganosis in wild herbivores in East Africa. Vet. Med. Rev. 1969; 104-114.
227. Dinnik, J.A. and R. Sachs. 1969. Zystizerkose der kreuzbeinwirbel bei Antilopen und Taenia olivoglinei sp. nov. der Tupfel-hyane. Z. Parasitenk. 31: 326-339.
228. Dinnik, J.A. and R. Sachs. 1972. Taenidae of lions in East Africa. Z. Tropenmed. 23: 197-210.
229. Dinnik, J.A., J.B. Walker, S.F. Barnett and D.W. Brocklesby. 1963. Some parasites obtained from game animals in Western Uganda. Bull. Epiz. Dis. Afr. 11: 37-44.
- deals with Strongyloides, Fasciola and Parafasciola robusta (gastrointestinal fluke).
230. Dirschl, H.J., S.W. Mbugua and S.P. Wetmore. 1978. Preliminary results from an aerial census of Kenya's rangelands. Mtn. Tourism & Wildlife, Kenya Rangeland Ecological Monitoring Unit, Nairobi. Aerial Survey Technical Report Series No. 3 17 pp.
231. Dittrich, L. 1967. Breeding Kirk's dik-dik (Madoqua kirki thomasi) at Hanover Zoo. Int. Zoo Yearbook 7: 171-173.
232. Dittrich, L. 1967. Breeding the black rhinoceros (Diceros bicornis) at Hanover Zoo. Int. Zoo Yearbook 7: 161-162.
233. Dittrich, L. 1969. Breeding the roan antelope (Hippotragus equinus) at Hanover Zoo. Int. Zoo Yearbook 9: 116.
234. Dooley, D.E. and E.M. King. 1977. Dictyocaulis arnfieldi infection in a Hartmann's zebra. J. Zoo Anim. Med. 8: 16-17.
235. Dougall, H.W. and D.L.W. Sheldrick. 1964. The chemical composition of a day's diet of an elephant. E. Afr. Wildl. J. 2: 51-59.
236. Dougall, H.W. 1963. On the chemical composition of elephant faeces. E. Afr. Wildl. J. 1: 123.
237. Drager, N. 1975. A severe outbreak of interdigital necrobacillosis in gemsbok (Oryx gazella) in the northern Kalahari (Botswana). Trop. Anim. Health Prod. 7: 200.
238. Drager, N. et al. 1976. Immobilization of African buffaloes (Syncerus caffer) in large numbers for veterinary research. E. Afr. Wildl. J. 14: 113-120.
239. Drevemo, S., J.G. Grootenhuis and L. Karstad. 1974. Blood parameters in wild ruminants in Kenya. J. Wildl. Dis. 10: 327-334.
- impala, Thomson's gazelle, Grant's gazelle, mountain reedbeek, blue wildebeest, Coke's hartebeest, topi, eland, buffalo and giraffe.
240. Drevemo, S. and L. Karstad. 1974. The effect of xylazine and xylazine-etorphine-acepromazine combination on some clinical haematological parameters in impala and eland. J. Wildl. Dis. 10: 377-383.
241. Dreyer, J.H. 1966. A study of hair morphology in the family Bovidae. Onderstepoort J. Vet. Res. 33: 379-472.
242. Du Boulay, G.H. and M.A. Crawford. 1968. Nutritional bone disease in captive primates. In: Comparative Nutrition of Wild Animals. Ed.: M.A. Crawford. Symp. Zool. Soc. London. NO. 21. pp. 223-236.

243. Duke, H.L. 1933. A study of the behaviour of Trypanosoma rhodesiense recently isolated from man, in antelope and other African animals. Pt. I. Ann. Trop. Med. Parasitol. 27: 215.
244. Duke, H.L. 1935. Further studies of the behaviour of Trypanosoma rhodesiense recently isolated from man, antelope and other African game animals. Parasitol. 27: 68.
245. Duncan, P. 1971. Immobilization of topi. E. Afr. Wildl. 9: 152.
246. Du Toit, P.J. 1947. Game in relation to animal diseases. J. S. Afr. Vet. Med. As. 18: 59-66.
247. E. Afr. Tryp. Research Org. 1956. Ann. Rep. (Trop. Dis. Bull. 1957, 1261) Comments on Trypanosoma rhodesiense from wild animals.
248. E. Afr. Tryp. Research. Org. 1958. Ann. Rep. (Trop. Dis. Bull. 1959, 494) Comments on Trypanosoma rhodesiense from wild animals.
249. Easterday, B.C. 1965. Rift Valley fever. Adv. Vet. Sci. 10: 65-119.
- cites others on demonstration of antibody in hippopotamus, and demonstration of non-fatal infection in field rats (Arvicanthus abyssinicus).
250. Ebedes, H. 1969. Notes on the immobilization of gemsbok (Oryx gazella gazella) in South West Africa using etorphine hydrochloride (M99). Madoqua 1: 35-45.
251. Ebedes, H. 1975. Anthrax epizootic in wildlife in the Etosha National Park, South West Africa. In: Wildlife Diseases. Ed. L.A. Page. Plenum Press, New York pp. 519-526.
252. Ebedes, H. 1975. The capture and translocation of gemsbok Oryx gazella gazella in the Nambi desert with the aid of fentanyl, etorphine and tranquillizers. J.S. Afr. Vet. Ass. 46: 359-362.
253. Ebedes, H. 1975. The immobilization of adult male and female elephant Loxodonta africana Bluenbach with etorphine and observation on the action of diprenorphine. Madoqua 9: 19-24.
- 8-10 mg etorphine reversed with deprenorphine 4-10 mg. or cyphrenorphine 20-25 mg.
254. Eltringham, S.K. 1974. The rescue of distressed large animals in national parks using drug immobilization. E. Afr. Wildl. J. 12: 233-238.
255. Emsley, P.K. 1978. Treatment of heartworm microfilaria in a marabou stork (Leptophilos crumeniferus): a case report. Ann. Conf. Wildlife Dis. Ass., Fort Collins, Colo. (P.O. Box 551, San Diego, Calif. 92112.).
- levamisole H cl 18.5 mg/kg per os in food. Abstract does not give duration of treatment.
256. English, M.P. et al. 1975. Invasion by Candida albicans of the foot pads of the central African hedgehog (Erinaceus albiventris). Mycopathologia 55: 139-141.
257. Engk, K. and K. Friedhoff. 1963. Zur Wirtsspezifität von Babesia bigemina (Piroplasmidae). Z. Tropenmed. Parasitol. 14: 502.
- transmission to Gazella soemmerringi.

258. Estes, R.D. 1966. Behaviour and life history of the wildebeest. *Nature* 212: 999-1000.
259. Eugster, A.K., S.S. Kalter, C.S. Kim and M.E. Pinkerton. 1969. Isolation of adenoviruses from baboons with respiratory and enteric infection. *Arch. Die. Virusforschung*. 26: 260-270.
260. Eveland, W.C. 1970. Listeriosis. In: *Infectious Diseases of Wild Animals*. Ed. J.W. Davis et al. Iowa State Univ. Press, Ames. pp. 273-282.
- host list includes baboon and gerbils.
261. Fain, A. and V. Herin. 1957. Deux cas de rhinosporidiose nasale chez une oie et un canard sauvage a Astrida (Ruanda-Urundi). *Mycopathologia* 8: 54-61.
- nasal polyps in a wild goose and a wild duck, containing sporangia resembling Rhinosporidium seeberi, the cause of human rhinosporidiosis.
262. Fain, A. and J. Mortelmans. 1975. Cas de gale chez des buffles du zoo produits par un nouvel acarien psoroptique. *Acta. Zoo. Path. Antverp.* 61: 47-56.
- Choriopsoroptes syncerus n. sp. in Syncerus nanus.
263. Falconer, J. 1972. The epizootology and control of foot-and-mouth disease in Botswana. *Vet. Rec.* 91: 354-359.
264. Falconer, J. and G. Child. 1975. A survey of foot-and-mouth disease in wildlife in Botswana. *Mammals* 39: 518-520.
265. FAO. 1966. General outline of the goals of wildlife management in Rhodesia in relation to the concept of multiple of natural resources. FAO, Rome. AN/MISC/66/3.
266. FAO. 1966. Notes on the care and preparation of wild game skins from the time animal is killed to despatch of the skins by the game rancher. FAO, Rome AN/MISC/66/6.
267. FAO. 1966. Optimum use of national parks and equivalent reserves. FAO, Rome AN/MISC/66/5.
268. FAO. 1966. Trypanosomiasis or tsetse fly disease. FAO, Rome. AN/MISC/CC/13.
269. FAO. 1969. Africa trypanosomiasis - Report of a joint FAO/WHO expert committee. Animal Prod. & Hlth. Div. FAO, Rome. Pub. on microfiche.
270. FAO. 1978. Terminal Report to the Government of Kenya on Wildlife Disease Research. FAO, Rome. AG/DP/KEN/68/013.
- includes data on wildlife surveys and experimental studies for infectious bovine rhinotracheitis, rinderpest, bovine viral diarrhoea, Rift Valley fever, bluetongue, other arboviruses, foot-and-mouth disease, African horse sickness, rabies, malignant catarrhal fever, trypanosomes, theileriosis, babesiosis, anaplasmosis, bovine petechial fever, brucellosis, tuberculosis, paratuberculosis, salmonellosis, leptospirosis, contagious bovine pleuropneumonia, caprine pleuropneumonia, worm parasites and ticks. Data on haematology and drug immobilisation also are presented.
271. Fassbender, C.F. and P. Meyer. 1974. Über die Verteilung von Trichinella spiralis in der Muskulatur einiger nordafrikanischer Carnivoren. *Deutsche tierärztliche Wochenschr.* 81: 284-287.

272. Fassbender, C.P. and P. Meyer. 1976. Zum Vorkommen und Nachweis von Trichinella spiralis bei Freilebenden Carnivoren, deren Fleisch für den menschlichen Genuss bestimmt ist. in: Wildlife Diseases. Ed. L.A. Page. Plenum Press. N.Y. pp. 585-588.
273. Fassbender, C.P. and P. Meyer. The distribution of Trichinella spiralis in the musculature of some north African carnivores. Animal Research and Development: A biannual collection of recent German contributions concerning development through animal research. 14: 55-61.
274. Fay, L.D. 1972. Exposure of Thomson's Gazelle to experimental infection with Cysticercus bovis. Vet. Rec. 90: 34-35.
275. Fay, L.D. 1972. Report to the Government of Kenya on wildlife disease research. FAO, Rome. TA. 3049.
276. Fear, F.A., M.E. Pinkerton, J.A. Cline, F. Kriewaldt and S.S. Kalter. 1968. Leptospirosis outbreak in a baboon colony. Lab. Anim. Care. 18: 22.
277. Fenwick, A. 1969. Baboons as reservoir host on Schistosoma mansoni. Trans Roy. Soc. Med. & Hyg. 63: 557-67.
278. Fessl, L. 1971. The sedation and immobilization of wild animals. Wien. Tierärztl. Wschr. 58: 179-185.
279. Field, C.R. 1976. Feeding trials to determine intake and digestibility of the diets of five herbivore species. FAO, Rome. Proj. Working Document no. 11 pp. 30.
- eland, Thomson's gazelle, Coke's hartebeest; compared with goats, sheep and cattle.
280. Field, C.R. and L.H. Blankenship. 1973. Nutrition and reproduction of Grant's and Thomson's gazelles, Coke's hartebeest and giraffe in Kenya. J. Reprod. Fert. Supp. 19: 287-301.
281. Fischthal, J.H. 1977. Some digenetic trematodes of birds from Central and West Africa. Revue de Zoologie Africaine 91: 675-680.
282. Fletch, A.O. 1970. Foot-and-mouth disease. In: Infectious Diseases of Wild Mammals. Ed. by J.W. Davis et al. Iowa State Univ. Press, Ames, pp. 68-75.
283. Ford, J. 1962. African wildlife and the tsetse fly-borne diseases. Bull. Epis. Dis. Afr. 10: 9-12.
284. Ford, J. 1966. The role of elephants in the distribution of tsetse fly. Int. U. Conserv. Nature Bull. 1966 Apr.-June.
285. Fowler, M.E. 1975. Toxicities in exotic zoo animals. Vet. Clin. N. Amer. 5: 685-698.
286. Fowler, M.E. et al. 1974. Osseous hydatidosis in a patas monkey. J. Amer. Vet. Med. Ass. 165: 840-844.
287. Fey, H., A. Kondi and V. Mbaya. 1965. Hematologic and biochemical indices in the East African baboon. Blood 26: 682-686.
288. Fradrich, H. 1966. Breeding and hand-rearing warthogs (Phacochoerus aethiopicus) at Frankfurt Zoo. Int. Zoo Yearbook 6: 200-202.
289. Frame, L.H. and G.W. Frame. 1976. Wild dogs of the Serengeti. Afr. Wildl. Leadership Foundn. News 11: (3): 1-6.
- behaviour.

290. Frank, H. 1968. Systemic histoplasmosis in an African monkey. *Deutsche Tierärztliche Wochenschrift* 75: 371-74.
291. Gallagher, J. 1972. Malignant oedema in antelopes. *Vet. Rec.* 90: 367-369.
292. Gallagher, J., J. Macadam, J. Sayer and L.P. Lavieren. 1972. Pulmonary tuberculosis in free-living lechwe antelope in Zambia. *Trop. Anim. Health Prod.* 4: 204-213.
293. Gandal, C.P. 1966. White muscle disease in a breeding herd of nyala antelope (*Tragelaphus angasi*) at New York Zoo. *Int. Zoo Yb.* 6: 277-278.
294. Garnham, P.C.C. 1960. Blood parasites of hippos in Uganda. *E. Afr. Med. J.* 37: 495.
295. Gear, J.H.S. 1975. Medical aspects of some zoonoses. *J.S. Afr. Vet. Ass.* 46: 221-225.
- deals with Rift Valley fever, Lassa fever, and marburg virus disease.
296. Gear, J.H.S. 1977. Haemorrhagic fevers of Africa: An account of two recent outbreaks. *J.S. Afr. Vet. Ass.* 48: 5-8.
- deals with Rift Valley fever, Lassa fever, and marburg virus disease.
297. Geigy, R. et al. 1971. Sleeping sickness survey in Misoma District, Tanzania. IV. Examination of wild mammals as a potential reservoir for *T. rhodesiense*. *Acta Trop.* 28: 211-220.
298. Geigy, R., M. Kaufmann and R. Beglinger. 1967. A survey of animals as potential reservoirs of trypanosomes in the Ulanga District (Tanzania). *Acta Trop.* 24: 97-108
299. Geigy, R., M. Kauffman, and L. Jenni. 1973. Wild mammals as reservoirs for Rhodesian sleeping sickness in the Serengeti. *Trans. Roy. Soc. Trop. Med. Hyg.* 67: 284-286.
300. Geigy, R., M. Kauffman, J.S.P. Mayende, P.M. Mwambu and R.Y. Onyango. 1973. Isolation of *Trypanosoma (Trypanosoma) rhodesiense* from game and domestic animals in Misoma District, Tanzania. *Acta Tropica.* 30: 49-56.
301. Gericke, M.D. and J.M. Hofmeyr. 1976. Astiology and treatment of capture stress and myopathy in springbok (*Antidorcas marsupialis*). *S. Afr. J. Sci.* 72: 281.
302. Gibbs, E.F.J., M.M. Rweyemamu. 1977. Bovine herpesviruses. I. Bovine herpesvirus 1. II. Bovine herpesviruses 2 and 3. *Vet. Bull.* 47: 317-343, 411-425.
- bovine herpesvirus 1 (the agent of IBR/IPV) is reported in wildebeest. Serological evidence of infection is reported also in African buffalo, hippopotamus, eland, impala, Thomson's gazelle, topi, kob, reedbuck, waterbuck and warthog.
303. Gispén, R. 1975. Relevance of some poxvirus infections in monkeys to smallpox eradication. *Trans. Roy. Soc. Trop. Med. Hyg.* 69: 299-302.
304. Gitter, M. and T.F. Brand. 1969. Salmonella in wildlife in the Nairobi National Park. *Trop. Anim. Health Prod.* 1: 85-88.
305. Gless, A., R. Sachs, J. Wisner-Pedersen, P. Marek and C. Staak. 1972. Technologische Vorschläge für die Konservierung und den Transport von Wildfleisch aus

Wildnutzungsprojekten in Ostafrikanischen Ländern.
Die Fleischwirtschaft 1972: 219-224.

306. Glover, P.E. Joyce Stewart, and M.D. Gwynne. 1966. Masai and Kipsigis notes on East African plants. 1 Grazing, browse, animal associated and poisonous plants. E. Afr. Agric. For. J. 32: 184-191.
- also pt. II. Domestic uses of plants. pp. 192-199.
- Pt. III. Medicinal uses of plants. pp. 200-207.
307. Goddard, J. 1970. Age criteria and vital statistics of a black rhinoceros population. E. Afr. Wildl. J. 8: 105-121
308. Gorovitz, C.H. 1962. Tuberculosis in an African elephant. Proc. 4th. Int. Symp. Diseases in Zoo Animals. Nord. Vet. Med. 14: Suppl. 1: 351-352.
309. Graber, M. 1969. Helminthes parasites de certains animaux domestiques et sauvages du Tchad. Bull. Epiz. Dis. Afr. 17: 403-428.
310. Graber, M. 1974. Cysticercus bovis parasitizing wild ruminants in the Republic of Chad. Bull. Epiz. Dis. Afr. 22: 345-348.
- 18 of 22 were armed cysticerci.
- 3 of 22 were C. bovis - 1 Corrina gazelle, 1 Dorcas gazelle, 1 Uganda kob.
- C. bovis is considered rarely a parasite of wild ruminants.
- mainly in tame animals in close proximity to human dwellings.
311. Graber, M. 1975. Helminths and helminthiasis of different domestic and wild animals of Ethiopia. Bull. Anim. Health Prod. Afr. 23: 57-86.
312. Graber, M. et al. 1973. Lungworms from Central African antelopes. Rev. Elev. Med. Vet. Pays Trop. 26: 313.
- Pneumostromylus cornigerus.
313. Graber, M. et al. 1973. Nematode pulmonaires des antilopes d'Afrique centrale. Rev. Elev. Med. Vet. Pays Trop. 26: 81-88.
314. Gracca, H.M. and F.M.H. Serrano. 1971. Malignant theileriosis originating from African buffaloes (Syncerus caffer) in cattle in Angola. Institute de Investigacao Veterinaria, Nova Lisboa, Angola.
315. Gradwell, D.V., A.P. Schutte, C.A.W.J. Van Niekerk and D.J. Roux. 1977. The isolate of Brucella abortus biotype 1 from African buffalo in the Kruger National Park. J.S. Afr. Vet. Ass. 48: 41-43.
316. Gradwell, D.V., C.A.W.J. Van Niekerk, and D.C. Joubert. 1976. Attempted artificial infection of impala, blue wildebeest, buffalo, kudu, giraffe and warthog with heartwater. J.S. Afr. Vet. Ass. 47: 209-210.
317. Graham, P. 1964. Destruction of birds and other wildlife by Dieldrex spraying against tsetse fly in Bechuanaland. Arnoldia 1: 1-4.
318. Graham-Jones, O. 1964. Restraint and anaesthesia of some captive wild animals. Vet. Rec. 76: 1216-1243.
- African animals: elephant, buffalo, zebra, lion, eland, giraffe, impala and chimpanzee.

319. Gratz, M.G., and A.A. Arata. 1975. Problems associated with the control of rodents in tropical Africa. Bull. World Health Org. 52: 697-706.
320. Gray, R.F. 1959. Hippopotamus milk analysis. Int. Zoo Yearbook 1.
321. Greed, R.E. 1960. The composition of the milk of the black rhinoceros. Int. Zoo Yearbook 2.
322. Greed, R.E. 1960. Composition of the milk of the giraffe. Int. Zoo Yearbook 2.
323. Gregory, E. Margaret, S.J. Rowland, and S.Y. Thomson, 1965. Changes during lactation in the composition of the milk of the African black rhinoceros (Diceros bicornis). Proc. Zool. Soc. Lond. 145: 327-333.
324. Gregory, M.W. 1976. Notes on the central African hedgehog, Erinaceus albiventris in the Nairobi area. E. Afr. Wildl. J. 14: 177-179.
325. Gregory, M.W. and M.P. English. 1975. Arthroderma benhamiae infection in the Central African hedgehog, Erinaceus albiventris and a report of a human case. Mycopathologia 55: 143-147.
326. Gregory, M.W. et al. 1975. An enzootic "growth" of Kenya hedgehogs: preliminary observations. In: Wildlife Diseases. Ed. L.A. Page, Plenum Press, New York, pp. 661-674.
327. Greichus, Yvonne A., Algirda Greichus, Barbara D. Ammann and John Hopcraft. 1978. Insecticides, polychlorinated biphenyls and metals in African Lake ecosystems. III. Lake Nakuru, Kenya. Bull. Env. Cont. Toxicol. 1978: 454-461.
328. Grimsdell, J.J.R. 1973. Age determination of the African buffalo, Syncerus caffer Sparrman. E. Afr. Wildl. J. 11: 31-53.
329. Griner, L.A. 1974. Some diseases of zoo animals. In: Adv. Vet. Sci. Comp. Med. 18: 251-271.
- deals with foot-and-mouth disease, rinderpest, blue-tongue, epizootic hemorrhagic disease of deer, avian malaria and gastric ulcers associated with nematodes in hyraxes.
330. Griner, L.A., G. Migaki, L.R. Penner and A.E. Makee, Jr. 1977. Heterakidosis and nodular granulomas caused by Heterakis isolonche in the ceca of gallinaceous birds. Vet. Pathol. 14: 582-590.
331. Griner, L.A. and L.S. Nelson. 1970. Hemorrhagic Diseases in Exotic Ruminants in a Zoo. J. Amer. Med. Ass. 157: 600-603.
- An epizootic of an acute, rapidly fatal disease occurred in 7 species of exotic ruminants at the San Diego Zoo. Experimental reproduction of the disease was made in deer by inoculation of bacteria-free pericardial fluid. It is believed that the disease was spread by an arthropod vector. The species included sable antelope and bushbuck. The cause was presumed to be epizootic hemorrhagic disease of deer virus.
332. Grocock, C.M. and C. Staak. 1969. The isolation of Brucella abortus from a waterbuck (Kobus ellipsiprymnus). Vet. Rec. Sept. 13: 318.
333. Grootenhuis, J.G., L.H. Karstad and S.A. Drevemo. 1976.

Experience with drugs for capture and restrain of wildebeest, impala, eland and hartebeest in Kenya. J. Wildl. Dis. 12: 435-443.

334. Grootenhuys, J.G. et al. 1975. Investigations on Theileria species from an impala. J. Wildl. Dis. 11: 122-127.
335. Grootenhuys, J.G. et al. 1977. Experimental transmission of a Theileria species between eland. J. Parasitol. 63: 1127-1129.
336. Grosskopf, J.F.W. 1958. Immunity to heartwater of elands. J.S. Afr. Vet. Med. Ass. 29: 329-330.
 - Author's summary: Eight young eland, originating from a heartwater free area, were each injected with 10 ml of heartwater-infected sheep blood. Slight temperature rises occurred between the 12th and 17th day after infection but no other symptoms were noticed. These antelopes have since grazed on infected heartwater veld for nearly three years without contracting the disease.
337. Guilbride, P.D. et al. 1963. Tuberculosis in the free-living African (Cape) buffalo (Syncerus caffer caffer, Sparrman). J. Comp. Path. 73: 337-348.
338. Guilbride, P.D.L., T.J. Coyle, E.G. McNulty, L. Barber, and G.D. Lomax. 1962. Some pathogenic agents found in hippopotamus in Uganda. J. Comp. Path. 72: 137-141.
339. Guindo, C. 1975. Contribution a l'etude de la fièvre catarrhale (bluetongue). Enquete serologique chez les ruminants domestiques et sauvages en Afrique intertropicale. Thesis Ecole Nationale Veterinaire de Lyon. 76 pp.
340. Guggisberg, C.A.W. 1966. S.O.S. Rhino. Andre Deutsch Ltd., London.
 - mentions skin lesions.
341. Haffner, K.V., Gisela Rack and R. Sachs. 1969. Verschiedene Vertreter der Familie Linguatulidae (Pentastomida) als Parasiten von Säugetieren der Serengeti. Mitt. Hamburg, Zool. Mus. Inst. 66: 93.
342. Haigh, J.C. 1976. Some mechanical faults associated with dart immobilization. J. Zoo. Anim. Med. 7: 12.
343. Haigh, J.C. 1976. The immobilization of bonds (Boocercus eurycus) and other African antelopes in captivity. Vet. Rec. March 20: 237-239.
344. Haigh, J.C. 1977. The capture of wild black rhinoceros using fentanyl and asaperone. S. Afr. J. Wildl. Res. 7: 11-14.
345. Haigh, J.C. and P.E. Holt. 1976. The use of the anaesthetic CT 1341 in a sarus crane. Can. Vet. J. 17: 291-292.
346. Haigh, J.C., J.W. Pharr, P.Y. Daoust. 1978. Pleuro-pericarditis and pneumonia due to Listeria monocytogenes in an African lion. J. Zoo. An. Med. 9: 38-42.
347. Hall-Martin, A.J. 1976. Dentition and age determination of the giraffe Giraffa camelopardalis. J. Zool., Lond. 180: 263-289.
348. Hamblin, C. and R.S. Hedger. 1978. Neutralising antibodies to parainfluenza 3 virus in African wildlife, with special

- reference to the Cape buffalo (Syncerus caffer). J. Wildl. Dis. 14: 378-388.
349. Hammond, J.A. 1972. Infections with Fasciola spp. in wildlife in Africa. Trop. Anim. Health Prod. 4: 1-13.
 350. Hammond, J.A. 1972. On Athesmia (Trematoda: Dicrocoeliidae) from jackals in Tanzania. J. Helminthol. 46: 175-184.
 351. Hammond, J.A. and D. Branigan. 1973. The disease factor in plans for domestication of wild ruminants in Africa. Vet. Rec. 92: 367-369.
 352. Hampton, J. Wildlife and foot-and-mouth disease. Black Lechwe 3: 38-44.
 353. Hampton, J.W.F. Viruses as parasites of wild mammals. Zoologica Africana 1: 249-258.
 354. Hanks, J. 1967. The use of M.99 for the immobilization of the Deffasa waterbuck. E. Afr. Wildl. J. 5: 96-105.
- 1.5 - 3.0 mg etorphine plus 2.5 - 10 mg acepromazine (lower doses are recommended as causing less interference with thermoregulation).
 355. Harthoorn, A.M. 1958. Measurements of body temperature in beisa, buffalo, eland, giraffe, rhinoceros, ostrich, camel, Uganda cattle and sheep by means of rectal thermister probe with about 150 yards plastic covered flex. J. Physiol. 145: 51.
 356. Harthoorn, A.M. 1965. Application of pharmacological and physiological principles in restraint of wild animals. Wild. Monogr. 14: 1-78.
 357. Harthoorn, A.M. 1966. Restraint of undomesticated animals. J. Amer. Vet. Med. Ass. 149: 875-880.
- in laboratory animals M99 produces analgesia, depression of respiration and cough centers, and lowering of body temperature. In hoofed animals M99 gives minor depression of respiration, cessation of ruminal movement, a stiffness of the musculature of neck and legs and tachycardia in some animals such as sheep and donkey, and a rise in blood pressure in the sheep.
 358. Harthoorn, A.M. 1970. The flying syringe. Ten years of immobilising wild animals in Africa. Geoffrey Bles, London. 287 pp.
 359. Harthoorn, A.M. 1972. Restraint and neurleptanalgesia in ungulates. Vet. Rec. 91: 63-66.
 360. Harthoorn, A.M. 1976. The chemical capture of animals. Bailliere Tindall, London. 416 pp.
- a guide to the chemical restrain of wild and captive animals.
 361. Harthoorn, A.M. 1977. Problems relating to capture. Animal Regulation Studies 1: 23-46.
- discusses problems resulting from over-exertion; hyperkalaemia, myogleginaemia, azetaemia, nephrosis, pulmonary hypertension, etc. Means of control and alleviation are described.
 362. Harthoorn, A.M., V. Finch, D. Hopercraft, and S.M. McGinnis. 1970. Adaptation to solar radiation by African large herbivores. J.S. Afr. Vet. Med. Ass. 41: 17-24.

363. Harthoorn, A.M. and L.M. Harthoorn. 1976. Parentrovite as a supportive therapy for locomotory stress in tsessebee. J. S. Afr. Vet. Ass. 47: 219-222.
364. Harthoorn, A.M. and J.A. Lock. 1960. A note on prophylactic vaccination of wild animals. Brit. Vet. J. 116-252.
365. Harthoorn, A.M. and K. Van der Walt. 1974. Physiological aspects of forced exercise in wild ungulates with special reference to so-called overstraining disease. 1. Acid-base balance and PO₂ levels in blesbock Damaliscus dorcas phillipsi. J.S. Afr. Wildl. Manage. Ass. 4: 25-28.
366. Harthoorn, A.M. and E. Young. 1974. A relationship between acid-base balance and capture myopathy in zebra (Equus burchelli) and an apparent therapy. Vet. Rec. 95: 337-342.
 - 1000 m Eq. Sodium bicarbonate in 1 litre of Normosol (balanced salt solution by Abbott Labs., S.A.).
367. Harthoorn, A.M. and E. Young. 1976. Pulmonary hypertension in relationship to acidemia after maximum forced exercise in zebra and wildebeest. J.S. Afr. Vet. Ass. 47: 187-189.
368. Hartley, E.G. 1964. Naturally occurring "B" virus infection in cynomolgous monkeys. Vet. Rec. 76: 555.
369. Hawkey, C.M. 1975. Comparative mammalian haematology. William Heinemann Medical Books Ltd., London. 310 pp.
370. Heberling, R.L., S.S. Kalter and A.R. Rodriguez. 1976. Poxvirus infection of the baboon (Papio cynocephalus) Bull. World Health Org. 54: 285-294.
371. Hedger, R.S. 1972. Foot-and-mouth disease and the African buffalo (Syncerus caffer). J. Comp. Path. 82: 19-28.
372. Hedger, R.S. 1975. Foot-and-mouth disease in wildlife with particular reference to the African buffalo (Syncerus caffer). In: Wildlife Diseases. Ed. L.A. Page Plenum Press. New York. pp. 235-244.
373. Hedger, R.S. 1978. Foot-and-mouth disease. MS prepared for 2nd Ed. of Infectious Diseases of Wild Mammals, Ed. by J.W. Davis et al., Iowa State Univ. Press Ames.
 - Among other species, FMD is reported in buffalo, bushbuck, warthogs, impala, waterbuck, kudu, sable antelope, and experimentally in hedgehog, porcupine, mole rat, Arvicanthus rat, and hyrax.
374. Hedger, R.S., J.B. Condy and J. Falconer. 1969. The isolation of foot-and-mouth disease virus from African buffalo (Syncerus caffer). Vet. Rec. 84: 516-517.
375. Hedger, R.S., A.J. Forman and M.H. Woodford. 1973. Foot-and-mouth disease virus in East African buffalo. Bull. Epiz. Dis. Afr. 21: 99-101.
376. Hedger, R.S. and C. Hamblin. 1978. Neutralizing antibodies to bovid herpes virus 1 (infectious bovine rhinotracheitis/infectious pustular vulvo-vaginitis) in African wildlife with special reference to the cape buffalo (Syncerus caffer). J. Comp. Path. Vol. 88: 211-218.
 - antibodies reported in buffalo, kudu, eland, waterbuck, lechwe, kob, reedbuck, sable and roan antelope, topi, hartebeest, wildebeest, impala and hippopotamus.

377. Hedger, R.S. et al. 1972. Infection of some species of African wildlife with foot-and-mouth disease virus. J. Comp. Path. 82: 455-461.
378. Hedger, R.S., K.A.J. Herniman, and J.B. Condy. 1969. Foot-and-mouth disease in wildlife in Rhodesia and other African Territories. J. Comp. Path. 79: 27-31.
379. Heinichen, J.G. 1974. Preliminary note on the life cycle of the lungworm Pneumostromylus calcaratus, Monnig, 1932. J.S. Afr. Vet. Ass. 45: 219-220.
- in impala.
380. Heisch, R.B. 1952. New piroplasms of a genet cat and a ground squirrel from Kenya. Ann. Trop. Med. Parasitol. 46: 150.
381. Heisch, R.B. 1957. Isolation of Leishmania from a ground squirrel. E. Afr. Med. J. 1957: 34.
382. Heisch, R.B. 1959. Rickettsia in Kenya. Serological reactions on wild rodents and inoculated guinea pigs. E. Afr. Med. J. 36: 2.
383. Heisch, R.B. 1959. Rift Valley rodents. E. Afr. Med. J. 36: 2.
384. Heisch, R.B. 1961. Rodents as reservoir of arthropod borne diseases in Kenya. E. Afr. Med. J. 38: 5.
385. Heisch, R.B. et al. 1962. Feral aspects of Rickettsial infections in Kenya. Trans. Roy. Soc. Trop. Med. 56: 272-278.
386. Heisch, R.B., J.P. McMahon and P.E.C. Manson-Bahr. 1958. The isolation of Trypanosoma rhodesiense from a bushbuck. Brit. Med. J. 11: 1203-1204.
387. Heisch, R.B. et al. 1963. The isolation of Brucella suis from rodents in Kenya. E. Afr. Med. J. 40: 132-133.
388. Herman, C.M. 1968. Blood protozoa of free-living birds. Symp. Zool. Soc. Lond. 24: 177-195.
389. Heuschle, W.P. and L. Coggins. 1965. Isolation of African swine fever virus from a giant forest hog. Bull. Epiz. Dis. Afr. 13: 255-262.
390. Heuschle, W.P. and L. Coggins. 1969. Epizootiology of African swine fever virus in warthogs. Bull. Epiz. Dis. Afr. 17: 179-183.
391. Heuschle, W.P., S.E. Stone and L. Coggins. 1965. Observations on the epizootology of African swine fever. Bull. Epiz. Dis. Afr. 13: 157-160.
392. Heywood, R. et al. 1970. The early clinical diagnosis of tuberculosis in baboons. Brit. Vet. J. 125: 372.
393. Hill, R.R., J.B. Condy, and B.A. Matsen. 1969. Theileria-type piroplasms of Rhodesian Artiodactyla. Vet. Rec. 84: 287-288.
394. Hillman, J.C. and A.K.K. Hillman. 1977. Mortality of wildlife in Nairobi National Park during the drought of 1973-74. E. Afr. Wildl. J. 15: 1-18.
395. Hime, J.M. 1974. Use of ketamine hydrochloride in non-domesticated cats. Vet. Rec. 95: 193-195.
396. Hime, J.M. et al. 1975. Measles in recently imported colobus monkeys (Colobus guereza). Vet. Rec. 97: 392.

397. Hitchins, P.M. and M.E. Keep. 1970. Observations on skin lesions in the black rhinoceros. *Lammergeyer* 12: 56-67.
398. Hitchins, P.M., M.E. Keep and K. Rochat, 1972. The capture of black rhinoceros in Hluhluwe Game Reserve and their translocation to the Kruger National Park. *The Lammergeyer* 17: 18-30.
399. Hoff, G.L., L.A. Griner and D.O. Trainer. 1973. Bluetongue virus in exotic ruminants. *J. Amer. Vet. Med. Ass.* 163: 565-567.
 - Virus was isolated from a greater kudu which died during an epizootic of a hemorrhagic disease in San Diego Zoo.
400. Hoff, G.L. and D.M. Hoff. 1976. Bluetongue and epizootic hemorrhagic disease: a review of these diseases in non-domesticated artiodactyles. *J. Zoo Anim. Med.* 7: 26-30.
 - The available literature concerning bluetongue disease and epizootic haemorrhagic disease in non-domesticated artiodactyles is reviewed under the following headings: (1) classification; (2) transmission and pathogenesis; (3) signs, pathology and diagnosis; (4) host range; (5) treatment and control; and (6) future needs and research.
401. Hofman, C., G. Kohler and R. Sachs. 1970. Knowledge of tick fauna in game animals of the Serengeti. *Acta Tropica* 27: 195-207.
402. Hofmann, R.R. 1966. Field and laboratory methods for research into the anatomy of East African game animals. *E. Afr. Wildl. J.* 4: 115-138.
403. Hofmann, R.R. 1968. Comparisons of rumen and abomasum structure in East African game ruminants in relation to their feeding habits. In: *Comparative Nutrition of Wild Animals*. Ed.: M.A. Crawford. Symp. Zool. Soc. London. No. 21. Academic Press, pp. 179-194.
404. Hofmann, R.R. and P. Scholz. 1968. Applied topographic-anatomical studies of East African game ruminants. *E. Afr. Wildl. J.* 6: 107-123.
405. Hofmeyr, C.F.B. 1956. Two hundred and eighty-four autopsies at the National Zoological Gardens, Pretoria. *J.S. Afr. Vet. Med. Ass.* 27: 263-282.
406. Hofmeyr, J.M. 1974. Developments in the capture and airlift of roan antelope Hippotragus equinus equinus under narcosis to the Stosha National Park. *Madoqua* 1: 37-48.
407. Hofmeyr, J.M. and J.R. De Bruine. 1973. The problems associated with the capture, translocation and keeping of wild ungulates in South West Africa. *The Lammergeyer* 18: 21-29.
 - black rhinoceros, roan antelope and black-faced impala.
408. Hofmeyr, J.M., and H. Ebedes, R.E.M. Fryer and J.R. De Bruine. 1975. The capture and translocation of the black rhinoceros Diceros bicornis Linn. in South West Africa. *Madoqua* 2: 35-44.
409. Hofmeyr, J.M. and J. Lenssen. 1975. The capture and care of eland Taurotragus oryx oryx (Fallas) using the boma method. *Madoqua* 2: 25-33.
410. Hofmeyr, J.M. and G.N. Louw. 1973. Incipient capture myopathy as revealed by blood chemistry of chased zebras. *Madoqua* 7: 45-50.

411. Hofmeyr, J.M. et al. 1977. Capture, handling and transport of springbok and the application of haloperidol as a long-acting neuroleptic. Madoqua 10: 123-130.
- capture by nets or boma traps. Haloperidol was injected by hand immediately after animals were trapped.
412. Holmes, R.G. and S. Ngethe. 1973. Restraint of captive and wild lion (Panthera leo), leopard (Panthera pardus) and cheeta (Asinonyx jubatus). Vet. Rec. 92: 290-291.
413. Hoogstraal, H. 1956. African Ixodidae. Vol. I. Ticks of the Sudan. U.S. Naval Med. Res. Unit. No. 3, Cairo, Egypt. 1101 pp.
414. Hoppe, P.F. 1977. How to survive heat and aridity: Ecophysiology of the Dikdik antelope. Vet. Med. RBv. No. 1: 77-86.
415. Hoppe, P.F. et al. 1977. Rumen fermentation and food selection in East African zebu cattle, wildebeest, Coke's hartebeest and topi. J. Zool., Lond. 181: 1-9.
416. Horak, I.G. 1978. Parasites of domestic and wild animals in South Africa. IX. Helminths in blesbok. J. Vet. Res. 45: 55-58.
417. Hornby, H.E. 1969. Stilesia infestation in East African antelopes. Vet. Rec. 84: 444.
- The author claims to find no objection to eating cooked livers of antelopes or sheep infected with Stilesia sp.
418. Houston, D.C. and J.E. Cooper. 1975. The digestive tract of the whiteback griffon vulture and its role in disease transmission among wild ungulates. J. Wildl. Dis. 11: 306-313.
- discusses anthrax.
419. Howard, D.A. 1964. The copper content of the liver of some game animals in Kenya. E. Afr. Wildl. J. 2: 47-50.
420. Howard, G.W. 1976. Parasite and disease transmission from wildebeest to cattle in Zambia. In: Wildlife and Ecological Research in Nature Reserves. Dept. Nat. Parks & Wildlife Service Ministry of Lands, Natural Resources and Tourism, Lusaka, Zambia. Prod. 4th Regional Wildlife Conf. for Eastern and Central Africa.
421. Howe, D.L. 1971. Babesiosis. In: Parasitic Diseases in Wild Mammals. Ed. J.W. Davis and R.C. Anderson. Iowa State Univ. Press, Ames. pp. 335-342.
422. Howe, D.L. 1971. Theileriosis. In: Parasitic Diseases of Wild Mammals. Ed. by J.W. Davis and R.C. Anderson. Iowa State Univ. Press, Ames, pp. 343-353.
423. Howell, P.G. et al. 1973. Foot-and-mouth disease in the African elephant (Loxodonta africana). Onderstepoort. J. Vet. Res. 40: 41-52.
424. Howell, P.G. and E. Young. 1971. Experimental foot-and-mouth disease in the African elephant. J.S. Afr. Vet. Med. Ass. 42: 94.
425. Huart, J.P. d'. 1974. Note sur la pathologie et le parasitisme chez le phocoehere (Phocochoerus aethiopicus) Acta Zool. Path. Antverp. 58: 41-50.
426. Hudson, J.R. 1933. A list of cestodes known to occur in East African mammals, birds and reptiles. J.R. Africa, Ugand. Nat. Hist. Soc. 49+50: 205-217.

427. Hudson, J.R. 1944. A short note on the history of rabies in Kenya. *E. Afr. Med. J.* 21: 322-27.
428. Hummel, P.H. 1976. Incidence in Tanzania of CF antibody to Coxiella burnetii in sera from man, cattle, sheep, goats and game. *Vet. Rec.* June 19: 4 pp.
429. Hutcheon, R.A. and H.O. Pamba. 1972. Report of a family outbreak of trichinosis, Kajiado District-Kenya. *East African Med. J.* 49: 663-666.
- from infected bushpig.
430. Hvidberg-Hanse, H. 1970. Contributions to the knowledge of the reproductive physiology of the Thomson's gazelle (Gazella thomsonii Gunther). *Mammalia* 34: 551-563.
431. Hvidberg-Hanse, H. 1971. Management and utilization of Thomson's gazelles on a cattle and sheep ranch in the Kenya Highlands. *E. Afr. Agric. Forest. J.* 36: 322-333.
432. Hvidberg-Hanse, H. and A. De Vos. 1971. Reproduction, population and herd structure of two Thomson's gazelle (Gazella thomsonii Gunther) populations. *Mammalia* 35: 1-16.
433. Ikede, B.O., S. Falade and R.R. Golding. 1976. Anthrax in captive carnivores in Ibadan, Nigeria. *J. Wildl. Dis.* 12: 130-132.
- in two genets and a caracal.
434. Irvin, A.D. 1970. The epidemiology of wildlife rabies. *Vet. Rec.* 87: 333-348.
- The disease is largely maintained by members of two orders: Carnivora and Chiroptera. The epidemiological role of rodents and other small mammals may be important, but at present is poorly understood. Silent infections, which occur in bats and families such as Mustelidae and Viverridae, conform to the classical host-parasite relationship and may be more important in maintenance of the disease than overt infections which attract more attention.
435. Irvin, A.D., P. Womwoyo, R.E. Purnell, M.A. Pierce and B. Schiemann. 1973. Blood parasites of the impala (Aepyceros melampus) in the Serengeti National Park. *Vet. Rec.* 93: 200-203.
- Theileria sp. 44.7%; Trypanozoon 5.8%; Haematoxenus 2.3%; and Borrelia 1.2%.
436. Irvin, A.D., M.A. Peirce, R.E. Purnell and J.M. King. 1972. The possible role of the eland in the epidemiology of East Coast Fever and other bovine theilerioses. *Vet. Rec.* 91: 513-517.
437. Jackson, C.H.W. 1955. The natural reservoir of Trypanosoma rhodesiense. *Trans. Roy. Soc. Trop. Med. Hyg.* 49: 582-587.
438. Janitschke, K., D. Pretz and H. Werner. 1976. Beitrag zum Entwicklungszyklus von Sarksporidien der Grantgazelle (Gazella granti). *Z. Parasitenk.* 48: 215-219.
- dogs and cats became final hosts.
439. Janse, B.C. 1952. Babesia thomasi sp. nov., an intra-erythrocytic parasite of Cape dassie (Procavia capensis Pallis). *Onderstepoort J. Vet. Res.* 25: 3.
440. Janse, B.C. 1969. Past, current and future control of epizootic disease in South Africa. *Trop. Anim. Health Prod.* 1: 96-102.

- discusses value of game-proof fences for control of spread of foot-and-mouth disease. African swine fever persists in warthogs and bush pig. Discusses the slaughter of game to control tsetse.
- 441. Jarrett, W.H.F., F.W. Jennings, M. Murray, and A.M. Harthoorn. 1964. Muscular dystrophy in wild Hunter's antelope. E. Afr. Wildl. J. 2: 158-159.
- 442. Jarrett, W.F.H. and M. Murray. 1967. Muscular dystrophy in antelope and gazelle in Kenya. Vet. Rec. 80: 483.
- 443. Johnson, O.W. and I.O. Buss. 1965. Molariform teeth of male African elephants in relation to age, body dimensions and growth. J. Mammal. 46: 373-384.
- 444. Johnson, O.W. and I.O. Buss. 1967. The testis of the African elephant (Loxodonta africana). I Histological features. J. Reprod. Fert. 13: 11-21.
- 445. Johnson, O.W. and I.O. Buss. 1967. The testis of the African elephant (Loxodonta africana). II Development, puberty and weight. J. Reprod. Fert. 13: 23-30.
- 446. Johnson, R.H. 1964. Isolation of a virus from a condition simulating panleucopaenia in a leopard. Vet. Rec. 76: 1008-1013.
- 447. Jones, D.M. 1971. The immobilisation of cattle and related species Vet. Rec. 89: 173.
 - etorphine with acepromazine maleate induces immobilisation but the excitatory side effects are not overcome. In wild animals severe dyspnoea, violent struggling, bellowing and salivation always occur. Xylazine appears to potentiate the actions of etorphine and the dose rates of both drugs when used separately may be reduced considerably when the drugs are combined.
- 448. Jones, D.M. 1976. An assessment of weapons and projectile syringes used for capturing mammals. Vet. Rec. 1976 Sept. 4 pp.
- 449. Jones, D.M. 1976. The husbandry and veterinary care of wild horses in captivity. Equine Vet. J. 8: 140-146.
- 450. Jones, D.M. 1977. The sedation and anaesthesia of birds and reptiles. Vet. Rec. 101: 340-342.
 - recommends ketamine HCl for birds and reptiles. Doses are given.
- 451. Jones, D.M. 1978. Scientific report 1975-1977. Zool. Soc. Lond. J. Zool., Lond. 184: 315-401.
 - Reports Ketamine anaesthesia in birds and reptiles. Ostriches are highly resistant.
 - Describes good response from vitamin A injections in skin lesions in rhinoceroses.
 - Reports successful use of an anaesthetic mixture of alphaxalone and alphadolone (Saffan - Glaxo) in cat species.
- 452. Jones, D.M., G.E. and G.R. Scott. 1970. Vervet monkey disease, a new zoonosis. Trop. Anim. Hlth. Prod. 2: 35-43.
- 453. Jones, R.C., W.W. Bailey and J.D. Skinner, 1975. Studies on the collection and storage of semen from the African elephant, Loxodonta africana. Koedoe. 18: 147-164.
- 454. Jones, R.S. 1972. A review of tranquillisation and sedation in large animals. Vet. Rec. 90: 613-617.

455. Kaliner, G. 1975. Observations on the histomorphology of sarcosporidian cysts of some East African game animals (Artiodactyla). *Z. Parasitenk.* 46: 13-23.
456. Kaliner, G. and J.E. Cooper. 1973. Dual infection of an African fish eagle with acid-fast bacilli and an Aspergillus sp. *J. Wildl. Dis.* 9: 51-55.
457. Kaliner, G., J.G. Grootenhuys and D. Prots. 1974. A survey for sarcosporidial cysts in East African game animals. *J. Wildl. Dis.* 10: 237-238.
458. Kaliner, G., R. Sachs, L.D. Fay and B. Schiemann. 1971. Presence of sarcocystosis in East African game animals. *Tropenmedizin und Parasitologie.* 22: 156-164.
459. Kaliner, G. and C. Staak. 1973. A case of orchitis caused by Brucella abortus in the African buffalo. *J. Wildl. Dis.* 9: 251-253.
460. Kalter, S.S., R.E. Kuntz, Y.A.L. Doory and A.A. Katsberg. 1968. Collection of biomedical study materials from baboons in East Africa. *Lab. Anim. Care* 16: 161-177.
461. Kaminjolo, J.S. and J. Paulsen. 1970. The occurrence of virus neutralising antibodies to infectious bovine rhinotracheitis virus in sera from hippopotami and buffaloes. *Zentralblatt für Veterinärmedizin Reihe B,* 17: 864-868.
462. Karstad, L. 1975. Cytomegalic inclusion disease in the East African hedgehog. *J. Wildl. Dis.* 11: 187-188.
463. Karstad, L. 1978. Parasites, wild animals, and animal production. In: *Parasites, Their World and Ours.* Ed.: A.M. Fallis. Proc. 18th Symposium Roy. Soc. Canada June, 1977. Pub. Roy. Soc. Canada, Ottawa. pp. 49-64.
- deals with general problem of wild animals acting as reservoirs of parasites of livestock. Examples given include malignant catarrhal fever, infectious bovine rhinotracheitis, African swine fever, rinderpest, foot-and-mouth disease, bluetongue, African horse-sickness, bovine petechial fever, anaplasmosis, besnoitiosis, trypanosomiasis, theileriosis, fascioliasis and haemonchosis.
464. Karstad, L., J.G. Grootenhuys and S.A. Drevemo. 1974. *Wildlife Disease Research*, FAO, Rome. TA3291.
465. Karstad, L. and J.S. Kaminjolo. 1978. Skin papillomas in impala and giraffe. *J. Wildl. Dis.* July/78.
466. Karstad, L. et al. 1974. Vulvovaginitis in wildebeest caused by the virus of infectious bovine rhinotracheitis. *J. Wildl. Dis.* 10: 392-396.
467. Karstad, L. et al. 1977. Poxvirus fibromas on African hares. *J. Wildl. Dis.* 13: 245-247.
468. Karstad, L. et al. 1978. Research on wildlife diseases in Kenya, 1967-1978. *Kenya Vet.* 2: 29-32.
469. Kasali, O.B. 1977. Rabies in a civet cat (Viverra civetta): case report. *Vet. Rec.* 100: 291.
- a captive civet.
470. Keeble, S.A. 1960. B-virus infection in monkeys. *Ann. N.Y. Acad. Sci.* 85: 960.
471. Keep, M.B. 1969. Internal and blood parasites of African

antelope. Vet. Rec. 84: 514.

- Stilesia hepatica was reported in Aepyceros melampus, Taurotragus oryx and Sylvicapra grimmia in South Africa. All were adults over a year old and Cooperioides hepaticae was frequently found in association.

472. Keep, M.E. 1970. Short veterinary notes. No. 1 Sarcosporidiosis in some wild animals in the Natal and Zululand game reserves. Lammergeyer no. 12: 66-67.
473. Keep, M.E. 1970. Short veterinary notes. No. 2. Strobiloestrus infestation in Zululand, Natal. Lammergeyer no. 12: 68-69.
474. Keep, M.E. 1970. Short veterinary notes. No. 3. Hepatozoonosis of some wild animals in Zululand. Lammergeyer No. 12: 70-71.
475. Keep, M.E. 1970. Short veterinary notes. No. 4. Sarcoptic mange in the black-backed jackal Canis mesomelas. Lammergeyer no. 12: 72-73.
476. Keep, M.E. 1970. A check list of the blood parasites recorded from the larger wild mammals in Zululand. Lammergeyer no. 11: 54-57.
477. Keep, M.E. 1971. Some parasites and pathology of the nyala Tragelaphus angasi and its potential value as a ranch animal. Lammergeyer no. 13: 45-54.
478. Keep, M.E. 1972. The meat yield, parasites and pathology of eland in Natal. Lammergeyer no. 17: 1-9.
479. Keep, M.E. 1972. The use of "Rompun" (BA 1470) Bayer on the white rhinoceros. Lammergeyer no. 17: 31-35.
480. Keep, M.E. 1973. The use of etorphine hydrochloride (M99) (Reckitt), fentanyl (Jannsen) and hyoscine hydrobromide combination for field capture of white rhinoceros. Lammergeyer no. 19: 28-30.
481. Keep, M.E. 1973. The problems associated with the capture and translocation of the black rhinoceros in Zululand, Republic of South Africa. Lammergeyer no. 18: 15-20.
482. Keep, M.E. 1973. Visible coronary vein aneurysms due to Cordophilus sagittus in nyala. Lammergeyer. no. 19: 24-27.
483. Keep, M.E. and P.A. Basson. 1973. Besnoitiosis in warthog (Phacochoerus aethiopicus). J.S. Afr. Vet. Ass. 1973: 287.
484. Keep, M.E. and P.A. Basson. 1973. Mycobacteriosis in a black rhinoceros (Diceros bicornis). J.S. Afr. Vet. Ass. 1973: 285-286.
485. Keep, M.E. and P.A. Basson. 1973. Mycotic infection in blue wildebeest (Connochaetes taurinus). J.S. Afr. Vet. Ass. 1973. 286-287.
- ringworm.
486. Keep, M.E. and P.J. Keep. 1967. Immobilisation of waterbuck. Vet. Rec. 81: 552.
487. Keep, M.E. and P.J. Keep. 1968. The immobilisation of eland Taurotragus oryx using new drug combinations. Lammergeyer no. 9: 18-22.
488. Keep, M.E., J.L. Tinley, K. Rochat and J.V. Clark. 1969. The immobilisation and translocation of black rhinoceros Diceros bicornis using etorphine hydrochloride (M99). Lammergeyer no. 10: 4-11.

489. Kemp, G.E. et al. 1974. Isolation of viruses from wild mammals in West Africa 1966-1970. *J. Wildl. Dis.* 10: 279-293.
 - bluetongue from a shrew.
 - Bhanja from hedgehog and squirrel.
 - Congo from hedgehog.
490. Kerr, M.A., V.J. Wilson and H.H. Roth. 1970. Studies on the agricultural utilization of semi-domesticated eland (Taurotragus oryx) in Rhodesia. 2. Feeding habits and food preferences. *Rhod. J. Agric. Res.* 8: 71-77.
491. Kerr, M.A. and H.H. Roth. 1970. Studies on the agricultural utilization of semi-domesticated eland (Taurotragus oryx) in Rhodesia. 3. Horn development and tooth eruption as indicators of age. *Rhod. J. Agric. Res.* 8: 149-155.
492. Keymer, I.F. 1963. Blood protozoa of wild mammals in northern Rhodesia. *J. Protozool.* 10: suppl. 1-30.
493. Keymer, I.F. 1964. Hepatozoon species in wild African mammals. *Vet. Rec.* 76: 641.
494. Keymer, I.F. 1966. Studies on blood protozoa of wild mammals from Central Africa. Thesis, Univ. London.
495. Keymer, I.F. 1967. Trypanosoma (Megatrypanum) spp. Hoare 1964 of ruminants. *Vet. Rec.* 80: 286.
496. Keymer, I.F. 1969. A survey of trypanosome infections in wild ungulates in the Luangwa Valley, Zambia. *Ann. Trop. Med. Parasitol.* 63: 195-200.
497. Keymer, I.F. 1969. Investigations on the duiker (Sylvicapra grimmia) and its blood protozoa in Central Africa. *Phil. Trans. Roy. Soc. B.* 255: 33.
498. Keymer, I.F. 1969. Piroplasms of Artiodactyla in Central Africa. *Vet. Rec.* 84: 486-487.
499. Keymer, I.F. 1971. Blood protozoa of wild carnivores in Central Africa. *J. Zool. No.* 4: 413-528.
500. Khalil, L.F. and L.M. Gibbons. 1975. Gazellestrongylus lerouxi Yeh, 1956 from antelopes in East Africa and its relation to the genus Paracooperia Travassos, 1935. *J. Helmintho.* 49: 271-279.
501. Khalil, G.M. and G.P. Schacher. 1965. Linguatula serrata in relation to Halsoun and Marara syndrome. *Amer. J. Trop. Med. Hyg.* 14: 736-746.
502. Khalil, 1977. The helminth parasites of the wildebeest in Kenya. (Proc. Spring Meet., British Soc. Parasit., Dundee, Scotland, 5-7 April. Abstract). *Parasitology* 75: 32.
503. Khan, A.Q. 1970. A note on salmonella infections in wild animals in Khartoum, Sudan. *Brit. Vet. J.* 126: 302-305.
504. Kim, C.S., A.K. Eugster and S.S. Kalter. 1969. Pathologic study of the African baboon (Panio sp.) in his native habitats. *Primates.* 9: 93-104.
505. Kim, C.S., E.A. Sueltenfus and S.S. Kalter. 1967. Isolation and characterization of viral agents isolated in an outbreak of pneumoenteritis in vervet monkeys (Cercoptes aethiops). *J. Inf. Dis.* 117: 292-300.
506. Kim, J.C.S. 1977. Pathobiology of pulmonary acariasis in old world monkeys. *Acareologia*, 19: 371-383.

507. Kim, J.C.S. and S.S. Kalter. 1975. Pathology of pulmonary acariasis in baboons (Papio sp.). J. Med. Primatol. 4: 70-82.
508. Kim, V.D. and B.G. Bang. 1970. Nasal mites parasitic in nasal and upper skull tissues in the baboon (Papio sp.). Science. 169: 373-374.
509. King, J.M. 1965. A field guide to the reproduction of the Grant's zebra and Grevy's zebra. E. Afr. Wildl. 3: 99-117.
- ageing of zebra.
510. King, J.M. 1969. The capture and translocation of the black rhinoceros. E. Afr. Wildl. J. 7: 115-130.
511. King, J.M. 1965. The use of the oripavine derivative M99 for the black rhinoceros and its antagonism with the related compound M285 or nalorphine. E. Afr. Wildl. J. 3: 19-26.
512. King, J.M., B.R. Heath and R.E. Hill. 1977. Game domestication for animal production in Kenya: theory and practice. J. Agric. Sci. UK. 89: 445-457.
513. Kingdon, J. 1971. East African Mammals. Vol. 1. Academic Press, London 446 pp.
- covers primates, hyraxes, pangolins, proto ungulates and nirianians. Anatomy, behaviour, evolution, distribution.
514. Kinghorn, A. and W. Yorke. 1912. Trypanosomes infecting game and domestic stock in the Luangwa Valley, North-eastern Rhodesia. Ann. Trop. Med. Parasitol. 6: 301.
515. Kinghorn, A. and W. Yorke. 1912. Further observations on the trypanosomes of game and domestic stock in north-eastern Rhodesia. Ann. Trop. Med. Parasitol. 6: 483.
516. Kleihauer, E. 1965. Haemoglobins of adult and foetal African elephants. Nature 207: 424-425.
- qualitative information on characteristics of Hb.
517. Klingel, H. 1965. Notes on tooth development and ageing criteria in the plains zebra. E. Afr. Wildl. J. 3: 127-129.
518. Koeman, J.H., J.H. Pennings, J.J.M. De Goeij, P.S. Tjice, P.M. Olindo and J. Hopcraft. 1972. A preliminary survey of the possible contamination of Lake Nakuru in Kenya with some metals and chlorinated hydrocarbon pesticides. J. Appl. Ecol. 9: 411-416.
- reports tuberculosis in flamingo, hepatitis in pelican and spoonbill, arteritis in flamingo, and kidney and ureter inflammation in flamingo.
519. Kok, O.B. 1973. Etorphine (M99) immobilisation and associated behaviour of the red hartebeest (Alcelaphus buselaphus caama). J.S. Afr. Wildl. Manage. Ass. 3: 9-15.
520. Kokles, R. 1977. Studies to detect IBR/IPV antibody in various domestic and wild animal species and in man. Monatshefte fur Veterinarmedizin 32: 170-171.
521. Kolbe, F.F. 1974. The status of tsetse flies in relation to game conservation and utilization. J.S. Afr. Wildl. Manage. Ass. 4: 43-49.
522. Krampitz, H.E., R. Sachs, G.B. Schaller and R. Schindler. 1968. Zur Verbreitung von Parasiten der Gattung Hepatozoon Miller, 1908 (Proteoza, Adeleidae) in ostafrikanischen Wildsaugtieren. Z. Parasitenk. 31: 203-210.

523. Kranendonk, O. et al. 1969. Leptospirosis in Kenya. WHO, Geneva. WHO/ZOO/69. 111. 5 pages.
524. Krushak, D.H. and W.V. Hartewell. 1968. Effect of phencyclidine on serum transaminase in chimpanzees. J. Amer. Vet. Med. Ass. 153: 866-867.
 - SGOT and SGPT values in serum from physically restrained animals were higher than the values observed in serums from anesthetized animals.
525. Kruuk, H. 1976. Feeding and social behaviour of the striped hyaena (Hyaena vulgaris Desmarest). E. Afr. Wildl. J. 14: 91-111.
526. Kuntz, R.E., B.J. Myers and T.E. Vice. 1967. Intestinal protozoans and parasites of the gelada baboon. Proc. Helminthol. Soc. Wash. 34: 65-66.
527. Kuntz, R.E. and B.J. Myers. 1967. Parasites of the Kenya baboon: Arthropods, blood parasites and helminths (Kenya 1966). Primates 8: 75-82.
528. Kuntz, R.E. and B.J. Myers. 1966. Parasites of baboons captured in Kenya and Tanzania, E. A. Primates 7: 27-32.
529. Kuntz, R.E. and B.J. Myers. 1967. Primate cysticercosis: T. hydatigena in Kenya vervet and Taiwan macaques. Primates 8: 83-88.
530. Kyle, R. 1972. Meat production in Africa. Bristol Vet. School, Bristol, U.K.
531. Kyle, R. 1973. Domestication of wild ruminants in Africa. Vet. Rec. 92: 573.
532. Lambrechts, M.C. et al. 1956. Observations on the transmission of foot-and-mouth disease to game and controlled transmission of the disease from game to cattle and vice versa by means of contact. J.S. Afr. Vet. Med. Ass. 27: 133-136.
533. Lamerton, J. 1960. Game, tsetse and trypanosomiasis. Preliminary results of an experiment in Central Tanganyika. 8th Meeting Intern. Sci. Comm. Tryp. Res. C.C.T.A. p. 179-186. Jos. 19-23 July.
 - experiment to ascertain which game animals maintained the tsetse population in a given area and then to find out what happened to the feeding habits of tsetse when cattle were introduced into that area. Further, the intention was to investigate which animals were not reservoirs of local pathogenic trypanosomes due to (1) true non-infectibility (2) lack of constant fly game contact (3) dislike by tsetse for some species of game. First year's work: Comparison and contrast of (a) animal abundance (b) results of blood meal analyses (c) animal abundance in sectors of fly-rounds. Game abundance was established by observation, spoor counts and hearsay. Results are given in several tables.
534. Lang, E.H. 1972. Fertility problems in captive animals. Brit. Vet. J. 128: 433-438.
535. Lang, E.M. 1965. Zahnbeobachtungen bei Elefanten. Z. f. Säugetierk. 30: 287-297.
536. Langridge, W.P. 1961. Kenya Veterinary Department: A note on the game animal hosts of tsetse flies and the incidence of trypanosomes in them.
 - Conference on Land Management problems in areas containing game: Lake Manyara, Tanganyika. 20th-22nd February, 1961.

Part II reported by H.C. Pereira B.A.A.F.R.O., Muguga, Kenya. Reprinted from E. Afr. Agric. Forest. J. 27: Oct. 1961.

537. Langridge, W.P. 1960. In tsetse control game slaughter is out-dated. Wildl. Mag. 2: (No. 2) 13. Pub. In. Nairobi by King & Charles.
538. Lawrence, B.S. 1961. Oestrid larvae from game. Proc. Zool. Soc. Lond. 136: 593-601.
539. Laws, R.M. 1966. Age criteria for the African elephant Loxodonta africana. E. Afr. Wildl. J. 4: 1-37.
540. Laws, R.M. 1968. Dentition and ageing of the hippopotamus. E. Afr. Wildl. J. 6: 19-52.
541. Laws, R.M. and G. Clough. 1965. Observations on reproduction in the hippopotamus, Hippopotamus amphibius. J. Reprod. Fert. 9: 369-370.
542. Laws, R.M. and J.S.C. Parker. 1968. Recent studies on elephant populations in East Africa. In: Comparative Nutrition of Wild Animals. Ed.: M.A. Crawford. Symp. Zool. Soc. London. No. 21. pp. 319-366.
- ageing, height and weight, reproduction, behaviour, jaw abscesses.
543. Lawson, K.P. et al. 1976. ERA strain rabies vaccine: oral vaccination of non-human primates. Can. Vet. J. 17: (10): 255.
544. Leach, T.M. 1957. The occurrence of contagious bovine pleuropneumonia in species other than domesticated cattle. Bull. Epiz. Dis. Afr. 5: 325-328.
- 6 species examined in Sudan, including 29 buffalo - no evidence of CBPP.
545. Leach, T.M. 1973. African trypanosomiasis. Adv. Vet. Sci. Comp. Med. 17: 119-151.
546. Ledger, H.P. 1963. A note on the relative body composition of wild and domesticated ruminants. Bull. Epiz. Dis. Afr. 11: 163-165.
547. Ledger, H.P. 1964. Weights of some East African mammals. E. Afr. Wildl. J. 2: 159.
548. Ledger, H.P. and R. Sachs. 1965. Wildnutzung in trockenen Gebieten Ost-Afrikas. Die Fleischwirtschaft 45: 1421-1424.
- comparison of carcass values from steers (Bos indicus) and antelopes (impala and topi). The steer carcasses contained 28.6% fat, the antelopes 1.8 - 1.4%. The antelopes are capable of producing more edible protein per unit of animal live weight.
549. Ledger, H.P., R. Sachs and W.S. Smith. 1967. Wildlife and food production. World Rev. Animal. Prodn. 3: 13-36.
550. Lee, V.H., O.R. Causey and D.L. Moore. 1974. Bluetongue and related viruses in Ibadan, Nigeria: Isolation and preliminary identification of viruses. Amer. J. Vet. Res. 35: 1105-1108.
551. Leuthold, W. 1970. Observations on the social organization of impala (Aepyceros melampus). Zeitschrift fur Tierphysiologie. 27: 693-721.
552. Leuthold, W. 1970. Preliminary observations on food habits of gerenuk in Tsavo National Park, Kenya. E. Afr. Wildl. J. 8: 73-84.

553. Leuthold, W. 1970. Some breeding data on Somali ostrich. *E. Afr. Wildl. J.* 8: 206.
554. Leuthold, W. 1971. Observations on the mother-young relationship in some antelopes. *E. Afr. Wildl. J.* 9: 152-154.
555. Leuthold, W. 1972. Gestation period in Thomson gazelle. *E. Afr. Wildl. J.* 10: 309-310.
556. Leuthold, W. 1972. Home range movements and food of a buffalo herd in Tsavo National Park. *E. Afr. Wildl. J.* 10: 237-243.
557. Levinger, I.M., J. Kedem and M. Abram. 1973. A new anaesthetic-sedative agent for birds. *Brit. Vet. J.* 129: 296-300.
- bay Va 1470 (Rompun). Prompt sedation after intramuscular administration.
558. Lewin, R. 1976. Chemical threat to Lake Makuru. *New Scientist.* 70: 638-639.
559. Lewis, A.R., and V.J. Wilson. 1977. An evaluation of a fence in the control of wild ungulates under extensive conditions in Africa. *Brit. Vet. J.* 133: 379.
560. Lewis, E.A. 1943. East Coast Fever and the African buffalo, the eland and the bushbuck. *E. Afr. Agric. J.* 2: 90-92.
- One of three buffalo were exposed to *T. parva* infected ticks but after recovery failed to infect clean ticks. Attempts to infect eland and bushbuck, by feeding on them ticks infected with *T. parva*, failed.
561. Libeau, J. and G.R. Scott. 1960. Rinderpest in Eastern Africa today. *Bull. Epiz. Dis. Afr.* 8: 23-26.
562. Lighfoot, C.J. and J. Posselt. 1977. Eland (*Taurotragus oryx*) as a ranching animal complementary to cattle in Rhodesia. 1. Environmental adaptation. *Rhod. Agric. J.* 74: 47-52.
563. Lobry, M.A. 1964. Diseases of domestic animals in African wild animals. *Bull. Epiz. Dis. Afr.* 12: 43-62.
564. Lohr, K.F. and H. Meyer. 1973. Game anaplasmosis: The isolation of *Anaplasma* organisms from antelope. *Z. Tropenmed. Parasitol.* 24: 192-197.
565. Lohr, K.F. and H. Meyer. 1974. Game theileriosis - a serological investigation. *Tropenmed. Parasitol.* 25: 288-292.
566. Lohr, K.F., J.P.J. Ross and H. Meyer. 1974. Detection in game of fluorescent and agglutination antibodies to intraerythrocytic organisms. *Tropenmed. Parasitol.* 25: 217-226.
567. Lombard, L.J. 1971. Age determination and growth curves in the black-backed jackal, *Canis mesomelas* Schreber, 1775 (Carnivore: Canidae). *Ann. Transvaal Mus.* 27: 135-169.
568. Losos, G.J. and G. Gwamako. 1973. Histological examination of wild animals naturally infected with pathogenic African trypanosomes. *Acta. Tropica.* 30: 57-63.
569. Louw, P.J. 1961. First trials with the coyote-getter in South Africa. *Dept. Nature Conserv. Bull. no. 18*: 98-100.
570. Lovemore, D.F. 1963. The effects of antitsetse shooting

operations on the game populations as observed in the Sebungwe District, Southern Rhodesia. In: Conserv. Nature Natural Resources in modern African states. IUCN publications new series 1: 232-234.

571. Luby, J.P. 1971. Another zoonosis from monkeys: Tanapox. *Ann of Internal Med.* 75: 800-801.
572. Luck, C.P. and P.G. Wright. 1964. Aspects of the anatomy and physiology of the skin of the hippopotamus (H. amphibius). *O.J. Exp. Physiol.* 49: 1-14.
573. Luckins, A.G. 1975. Serum immunoglobulin levels and electrophoretic patterns of serum proteins in trypanosome-infected bushbuck (Tragelaphus scriptus). *Ann. Trop. Med. Parasitol.* 69: 337-344.
574. Lumsden, W.H.R. 1962. Trypanosomiasis in wildlife. *Proc. 1st Conf. Wildl. Dis., New York*. pp. 68-95. Published on microcards by the Wildlife Disease Ass., Ames, Iowa.
575. Lyon, D.G. 1971. The immobilisation of cattle and related species. *Vet. Rec.* 89: 254.
576. Lyon, D.G. 1973. Some ruminant diseases encountered at the north of England Zoological Gardens, Chester. *Proc. XV Internat. Symp. Dis. Zoo Animals*. Kelmarden. Pub. by Akademik-Verlag Berlin. pp. 5-13.
 - records human type Mycobacterium tuberculosis in a giraffe, and problems with Trichuris sp. in giraffes, eventually treated successfully with parabendazole. A case of malignant edema occurred in a blesbuck after immobilization with a projectile syringe.
577. Macaulay, J.W. 1963. Foot-and-mouth disease in non-domestic animals. *Bull. Epiz. Dis. Afr.* 11: 143-146.
578. Macaulay, J.W. 1964. A check-list of non-domestic animals reported to have been infected with foot-and-mouth disease. *Bull. Epiz. Dis. Afr.* 12: 127-128.
579. Mack, R. 1970. The great cattle plague epidemic of the 1890's. *Trop. Anim. Health. Prod.* 2: 210-219.
580. Macleod, J. 1975. Apparent host selection by some African tick species. *Oecologia* 19: 359-370.
581. MacOwan, K.D. 1962. Rinderpest. In: Report for 1960, Dept. Veterinary Services, Kenya. *Bull. Epiz. Dis. Afr.* 10: 72.
 - reports outbreaks involving buffalo, eland, giraffe, bushpig, kudu.
 - occurrence in eland in Karamoja, Uganda, also mentioned in the same volume of this journal - page 542.
582. Mair, N.S. 1968. Pseudotuberculosis in free-living wild animals. *Symp. Zool. Soc. Lond.* 24: 107-117.
583. Malherbe, H. and M. Strickland-Chomley. 1970. The viruses of vervet monkeys and baboons in South Africa. *J.S. Afr. vet. med. Ass.* 41: 177.
584. Mandour, A.M. and J.F. Keymer. 1970. Sarcocystis infection in African antelopes. *Ann. Trop. Med. Parasitol.* 64: 513-523.
585. Mansvelt, P.R. 1965. The role of wildlife in the epizootiology of some infectious and parasitic animal diseases in South Africa. *Bull. Off. Int. Epiz.* 64: 825-835.
 - deals with rabies, foot-and-mouth disease, African swine fever, bluetongue, African horse sickness, malignant

catarrhal fever, heartwater, tuberculosis, anthrax, theileriosis, trypanosomiasis and helminthiasis.

586. Manton, V.J.A. 1963. Immobilisation of topi and hippopotami. Vet. Rec. 75: 663-664.
587. Manton, V.J.A. 1975. Captive breeding of cheetahs. In: Breeding Endangered Species in Captivity. Ed. R.D. Martin. Academic Press, New York. pp. 337-344.
588. Mare, C.J. 1975. The role of wild pigs in the epidemiology of African swine fever. In: Wildlife Diseases. Ed. B.A. Page, Plenum Press, New York. pp.227-234.
589. Marennikova, S.S. et al. 1975. Pox infections in carnivora of the family Felidae. Acta. Virol. 19: 260.
590. Marennikova, S.S. and E.M. Shelukhina. 1976. White rats as source of pox infection in Carnivora of the family Felidae. Acta. Virol. 20: 442.
591. Marennikova, S.S., N.N. Maltseva, V.I. Korveeva and N.M. Garamina. 1977. Outbreak of pox disease among Carnivora (Felidae) and Edentata. J. Inf. Dis. 135: 358-366.
592. Marennikova, S.S., E.M. Shelukhina and L.S. Shenkman. 1976. "White-wild" (Variola-like) poxvirus strains from rodents in equatorial Africa. Acta. Virol. 20: 80-82.
593. Martin, H. and D.W. Brocklesby. 1960. A new parasite of the eland. Vet. Rec. 72: 331.
594. Martinaglia, G. 1930. A strain of Mycobacterium tuberculosis from the giraffe, and further observations of M.tuberculosis from kudu and the duiker. 16th Rep. Dir. Vet. Serv. Anim. Ind: 145-145.
595. Martinaglia, G. 1930. Redwater (babesiosis) in a sable antelope. J.S. Afr. Vet. Ass. 1: 41-42.
596. Mason, J.H. 1968. Clostridium botulinum type D in mud of lakes of Zululand game parks. J.S. Afr. Vet. Med. Ass. 39: 37.
 - Authors summary: Clostridium botulinum type D was present in seven of 34 samples of mud taken from five lakes in the Zululand game parks.
597. Matthews, L.H. 1939. Reproduction in the spotted hyaena, Crocuta crocuta Erxl. Roy. Soc. Lond. Phil. Trans. B. 230: 1-78.
598. May, T.L. and J. Condry. 1965. Foot-and-mouth disease in game in Rhodesia. Bull. Off. Int. Epiz. 64: 805-811.
599. McCaughey, W.J. 1968. Brucellosis in wildlife. Symp. Zool. Soc. Lond. 24: 99-105.
600. McConnell, E.E. et al. 1974. A survey of diseases among 100 free-ranging baboons (Papio prsinus) from the Kruger National Park. Onderstepoort J. Vet. Res. 41: 97-168.
601. McConnell, E.E., R.C. Tustin and V. De Vos. 1972. Anthrax in an African buffalo. J.S. Afr. Vet. Ass. 43: 181-195.
602. McCulloch, B. 1967. Degenerative polymyopathies in East African domestic and wild animals. Vet. Rec. 80: 687.
603. McCulloch, B. 1967. Trypanosomes of the brucei subgroup as a probable cause of disease in wild zebra (Equus burchelli). Ann. Trop. Med. Parasitol. 61: 261-264.

604. McCulloch, B. and P.L. Archard. 1969. Mortalities associated with capture, translocation, trade and exhibition of black rhinoceroses. *Int. Zoo Yearbook* 2: 184-191.
605. McCulloch, J.S.G. and L.M. Talbot. 1965. Comparison of weight estimation methods for wild animals and domestic livestock. *J. Appl. Ecol.* 2: 59-69.
606. McCully, R.M. et al. 1971. Herpes nodules in the lung of the African elephant (Loxodonta africana (Blumenbach, 1777)). *Onderstepoort J. Vet. Res.* 38: 225-236.
607. McCully, R.M., P.A. Basson, R.W. Bigalke, V. Devos and E. Young. 1975. Observations on naturally acquired hepatozoonosis of wild carnivores and dogs in the Republic of S. Africa. *Onderstepoort J. Vet. Res.* 42: 117-134.
608. McCully, R.M., P.A. Basson, V. Devos and A.J. Devos. 1970. Uterine coccidiosis of the impala caused by Eimeria neitzi spec. nov. *Onderstepoort J. Vet. Res.* 37: 45-58.
609. McCully, R.M., P.A. Basson, J.G. Pienaar, B.J. Erasmus, E. Young and L.M. Pieterse. 1969. Herpes nodules in elephants. *J.S. Afr. Vet. Med. Ass.* 40: 422.
610. McCully, R.M., P.A. Basson, J.W. Van Mierkerk and R.D. Bigalke. 1966. Observations on Besnoitia cysts in the cardiovascular system of some wild antelopes and domestic cattle. *Onderstepoort J. Vet. Res.* 33: 245.
611. McCully, R.M., M.E. Keep and P.A. Basson. 1971. Cytauxzoonosis in a giraffe in Zululand. *Onderstepoort J. Vet. Res.* 37: 7-9.
612. McCully, R.M., S.P. Kruger, P.A. Basson, H. Ebedes and J.W. Van Mierkerk. 1969. Strongylidosis; Delafondiasis in the Zebra. *Onderstepoort J. Vet. Res.* 36: 105.
613. McCully, R.M., J.W. Van Mierkerk and P.A. Basson. 1967. The pathology of Cordophilus sagittus (v. LINSTOW, 1907) infestation in the kudu (Tragelaphus astrepsiceros) (PALLAS, 1766), bushbuck (Tragelaphus scriptus) PALLAS, 1766) and African buffalo (Syncerus caffer) (SPARRMAN, 1779) in South Africa. *Onderstepoort J. Vet. Res.* 34: 137-160.
614. McCully, R.M., J.W. Van Mierkerk and S.P. Kruger. 1967. Observations on the pathology of bilharziasis and other parasitic infestations of Hippopotamus amphibius Linnaeus, 1758, from the Kruger National Park. *Onderstepoort J. Vet. Res.* 34: 563.
615. McDiarmid, A. 1962. Diseases of free-living wild animals. *FAO Agricultural Series* 57. FAO, Rome.
616. McGaughey, W.J. 1968. Brucellosis in wildlife. *Symp. Zool. Soc. Lond.* 24: 99-105.
617. Meeser, M.J.W. 1962. Foot-and-mouth disease in game animals with special reference to the impala (Aepyceros melampus). *J.S. Afr. Vet. Med. Ass.* 33: 351-355.
618. Mehlhorn, H., W.J. Hartley and A.O. Heydorn. 1976. A comparative ultrastructural study of the cyst wall of 13 Sarcocystis species *Parasitologica* 12: 451-467.
619. Mettrick, D.F. and M. Beverley-Burton. 1961. Some cyclophyllidean cestodes from carnivores in Southern Rhodesia. *Parasitol.* 51: 533-544.
- from genets and hyaenas.

620. Mettam, R.W.M. 1923. Snotsiekte in cattle. 9th and 10th Rep. Dir. Vet. Educ. Res., U. of S. Africa. p. 393.
621. Miller, J.H. 1959. Schistosoma mansonii in baboons. E. Afr. Med. J. 36: 56.
622. Miller, J.H. 1960. Papio doguera (dog faced baboon), a primate reservoir host of Schistosoma mansonii in East Africa. Trans. Roy. Soc. Trop. Med. Hyg. 54: 44-46.
623. Mohan, R.W. and M.G. Gotts. 1970. Diseases and parasites of the African buffalo. Vet. Bull. 40: 157-165.
- a very comprehensive review.
624. Mollat, C.L. 1978. Cervico-vaginal prolapse in an African elephant. E. Afr. Wildl. J., 16: 59.
625. Monnig, H.O. 1931. Wild antelopes as carriers of nematode parasites of domestic ruminants. 17th Report of the Director of Veterinary Services and Animal Industries, Union of South Africa pp. 233-254.
626. Monnig, H.O. 1932. Wild antelopes as carriers of nematode parasites of domestic ruminants. 18th Report of the Director of Veterinary Services and Animal Industries, Union of South Africa, pp. 153-172.
627. Monnig, H.O. Wild antelopes as carriers of nematode parasites of domestic ruminants. Onderstepoort J. Vet. Sci. Anim. Ind. 1: 77-92.
628. Moore, J.G. 1970. Epizootic of acanthocephaliasis among primates. J. Amer. Vet. Med. Ass. 157: 699-705.
- in five gibbons, three orangutans and one gorilla.
629. Morrison-Scott, T.C.S. 1947. A revision of our knowledge of African elephant's teeth with notes on "forest" and "pygmy" elephants. Proc. Zoo. Soc. London 117: 505-527.
630. Mortelmans, J. 1961. Treatment of intestinal capillariosis in the Congo peacock and other wild fowls and of trichuriasis in monkeys and chimpanzees. Int. Zoo Yb. 3: 124-127.
631. Mossman, A.S. and R.F. Dasmann. 1966. Game ranching handbook. Published by Food and Agriculture Organization, Rome. FAO AM/MISC/66/15.
632. Mossman, A.S., P.A. Johnstone, C.A.R. Savory and R.F. Dasmann. 1963. Neck snare for live capture of African ungulates. J. Wildl. Manage. 27: 132-135.
633. Moulton, J.E. and R. Sachs. 1970. Verminous pneumonia in East African game animals. J. Comp. Pathol. 80: 169-172.
- grossly - two types - A. Small protostrongylids: four species B. Protostrongylus africanus
- Gp A - Pneumstrongylus calcaratus in wildebeest, kongoni, impala, Grant's gazelle and Thomson's gazelle. Protostrongylus eteshai in wildebeest, hartebeest and topi. Protostrongylus gazellae in Grant's and Thomson's gazelles. Pneumstrongylus cornigerus in topi and hartebeest.
- Gp B - Protostrongylus africanus in hartebeest, topi and wildebeest (also in impala and Thomson's gazelle).
634. Mueller, W.W. and U. Schoop. 1976. Natural resistance of an African rodent, Prionomys (mastomys) natalensis, to rabies infection. Ann. Microbiol. (Inst. Pasteur) 127A: 337-453.

635. Muger, G.M. 1968. Sarcosporidiosis in gazelles in Kenya. E. Afr. Wildl. J. 6: 139-140.
636. Muger, G.M. 1969. Lesions caused by Cooperioides hepatica and Stilesia hepatica in the liver of Kenya impala. Bull. Epiz. Dis. Afr. 17: 311-316.
- very brief. No information on prevalence.
637. Muger, G.M. 1970. Toxic and medicinal plants of East Africa - Parts I and II. Bull. Epiz. Dis. Afr. 18: 377-403.
638. Muger, G.M. and J.G. Wandra. 1967. Degenerative polymyopathies in East African domestic and wild animals. Vet. Rec. 80: 419-413.
639. Munz, E.K., E. Ackermann and M. Reimann. 1975. Occurrence of haemagglutination - inhibiting antibodies against the reovirus serotypes 1, 2, and 3 in different parts of Tanzania. Bull. Anim. Health Prod. Afr. 23: 11-37.
- antibodies in antelopes, zebra and warthogs.
640. Murray, M. 1967. The pathology of some diseases found in wild animals in East Africa. E. Afr. Wildl. J. 5: 37-46.
641. Murray, M., H. Campbell and W.H.E. Jarrett. 1964. Spirocerca lupi in a cheetah. E. Afr. Wildl. J. 2: 164.
642. Mwambu, P. et al. 1976. Trypanosomiasis survey in Kigoma, Tanzania. E. Afr. J. Med. Res. 3: 7-28.
643. Mwambu, P.M. and M.H. Woodford. 1972. Trypanosomes from game animals of the Queen Elizabeth National Park, Western Uganda. Trop. Anim. Health Prod. 4: 152-155.
644. Myers, B.J. and R.E. Kuntz. 1965. A checklist of parasites reported for the baboon. Primates 6: 137-194.
645. Myers, B.J. and R.E. Kuntz. 1967. Parasites of baboons taken by the Cambridge Mwanza expedition (Tanzania 1965). E. Afr. Med. J. 44: 322-324.
646. Myers, B.J. and R.E. Kuntz. 1968. Intestinal protozoa of the baboon Papio doguera Pucheran 1856. J. Protozool. 15: 363-365.
647. Neitz, W.O. 1931. Blood parasites of game in Zululand. 17th Rep. Dir. Vet. Serv. An. Ind., U. of S. Afr. pp. 45-60.
648. Neitz, W.O. 1933. Blood parasites of game in Zululand. Onderstepoort J. Vet. Sci. Anim. Ind. 1: 411-420.
649. Neitz, W.O. 1933. The blesbuck (Damaliscus albifrons) as a carrier of heartwater and bluetongue. J.S. Afr. Vet. Med. Ass. 4: 24-26.
650. Neitz, W.O. 1935. The blesbuck (Damaliscus albifrons) and the black wildebeest (Connochaetes gnou) as carriers of heartwater. Onderstepoort J. Vet. Sci. 5: 35-40.
651. Neitz, W.O. 1935. The transmission of Anaplasma marginale to a black wildebeest (Connochaetes gnou). Onderstepoort J. Vet. Sci. Anim. Ind. 5: 9-14.
652. Neitz, W.O. 1936. Anthrax: death in blesbuck (Damaliscus albifrons) following the use of goat anthrax vaccine. J.S. Afr. Vet. Med. Ass. 7: 119-120.
653. Neitz, W.O. 1937. The transmission of heartwater to and from the blesbuck (Damaliscus albifrons) by means of the

- bont tick (Amblyomma hebraeum). Onderstepoort J. Vet. Sci. Anim. Ind. 9: 37-46.
654. Weitz, W.O. 1939. Ovine anaplasmosis; the transmission of Anaplasma ovis and Eperythrozoon ovis to the blesbuck (Damaliscus albifrons). Onderstepoort J. Vet. Sci. Anim. Ind. 13: 9-16.
 655. Weitz, W.O. 1944. The susceptibility of the springbuck (Antidorcas marsupialis) to heartwater. Onderstepoort. J. Vet. Sci. 20: 25.
 656. Weitz, W.O. 1955. Corridor disease: A fatal form of bovine theileriosis encountered in Zululand. Bull. Epiz. Dis. Afr. 3: 121-123.
 657. Weitz, W.O. 1957. Theileriosis, Gonderiosis and Cytauzoonoses: a review. Onderstepoort J. Vet. Res. 27: 275-430.
 658. Weitz, W.O. 1958. Can corridor disease-recovered cattle serve as reservoirs of Gonderia lawrencei? Bull. Epiz. Dis. Afr. 6: 151-154.
 659. Weitz, W.O. 1963. African swine fever in: Emerging Diseases of Animals. FAO, Rome. FAO Agric. Studies No. 61. pp. 1-70.
 660. Weitz, W.O. 1964. Cytauzoonoses in African antelopes. Bull. Off. Int. Epiz. 62: 1009-1015.
 661. Weitz, W.O. 1965. A check-list and host-list of the zoonoses occurring in mammals and birds in South and South-West Africa. Onderstepoort J. Vet. Res. 32: 189.
 662. Weitz, W.O. 1967. The epidemiological pattern of viral, protophythal and protozoal zoonoses in relation to game preservation in South Africa. J.S. Afr. Vet. Med. Ass. 38: 129-141.
 663. Weitz, W.O., A.S. Canham and E.B. Kluge. 1955. Corridor disease: A fatal form of bovine theileriosis encountered in Zululand. J.S. Afr. Vet. Med. Ass. 26: 79.
 664. Weitz, W.O. and A.D. Thomas. 1938. Rickettsiosis in the dog. J.S. Afr. Vet. Med. Ass. 9: 168-174.
 - Postulates that Ehrlichia canis infection may account for decline in numbers of wild dogs (Lycaon pictus) in the Kruger National Park.
 "A jackal (Thos mesomelas) available to us was infected but developed no symptoms, although it was shown by subsequent subinoculations to harbour the parasite for a long period". - for 112 days, they report later in the paper.
 665. Weitz, W.O. and P.J. Da Toit. 1932. Bovine Anaplasmosis. A method of obtaining pure strains of Anaplasma marginale and Anaplasma centrale by transmission through antelopes. 18th Rep. Dir. Vet. Serv. and Anim. Ind., U.S. Afr. pp. 3-20.
 666. Weitz, W.O. and B.C. Jansen. 1957. A discussion of the classification of Theileridae. Onderstepoort J. Vet. Res. 27: 7-18.
 667. Weitz, W.O. and H.P. Steyn. 1947. The transmission of Babesia canis (Piana and Galli-Valerio, 1895) to the black-backed jackal (Thos mesomelas mesomelas (Schreber) and a discussion on the classification of the piroplasms of the Canidae. J.S. Afr. Vet. Med. Ass. 18: 1-12.
 668. Weitz, W.O. and A.P. Thomas. 1948. Cytauxoon sylvicaprae.

- Gen. Nov., a protozoan responsible for a hitherto underscribed disease in duiker. Onderstepoort J. Vet. Sci. Anim. Ind. 23: 63-76.
669. Nelson, G.S. 1960. Schistosome infection as a zoonosis in Africa - Trans. Roy. Soc. Trop. Med. Hyg. 54: 301-23.
 670. Nelson, G.S., C.W.A. Guggisberg and J. Mukundi. 1963. Animal hosts of Trichinella spiralis in East Africa. Ann. Trop. Med. Parasitol. 57: 332-346.
 - Infection was found in bushpig, lion leopard, serval, spotted hyaena, striped hyaena, jackal. The Kenya strain is reported to be of low infectivity for rats and pigs and high infectivity for man.
 671. Nelson, G.S., F.R.M. Pester and R. Rickman. 1965. The significance of wild animals in the transmission of cestodes of medical importance in Kenya. Trans. Roy. Soc. Trop. Med. and Hyg. 59: 507-524.
 - Taenia adults were found in lion, leopard, hyaena, jackal and dog. In many animals there were hundreds of immature worms but in each there was a hooked scolex, and none was T. saginata. They represent at least 6 distinct species.
 672. Nelson, G.S., C. Teesdale and R.B. Highton. 1962. The role of animals as reservoirs of bilharziasis in Africa. Ciba Foundation Symposium on Bilharziasis: 127-149.
 673. Nevill, G.F., W.G. Crompton, M.A. Hennessey and P.F. Watson. 1976. Instrumentation for artificial insemination in the African elephant. Int. Zoo Yb. 16: 166-171.
 674. Norris, D. and C. Jarvis. 1960. Gestation periods. Int. Zoo. Yearbook 1.
 675. Obi, T.U. 1978. Traumatic granuloma in an African elephant (Loxodonta africana) and its treatment with Yatren - Casein. E. Afr. Wildl. J. 16: 69-71.
 676. Oelofse, J. 1970. Plastic for game catching. Oryx 10: 306-308.
 677. Okia, M.O., P.V. George, P.M. Tukei, G.W. Kafuko, M. Lule, E. Sekyalo, and A. Mukiye. 1971. Arbovirus survey in wild birds in Uganda. E. Afr. Med. J. 48: 725-51.
 678. Olubayo, R.O. and G.W. Mwangela. 1978. Toxoplasma gondii and Salmonella infection in colobus monkey (Colobus abyssinicus). Kenya Vet. J. 2: 17-18.
 679. Orbanyi, I. and G. Stohl. 1962. Elefant-Urin Untersuchungen. Proc. 4th Int. Symp. Diseases in Zoo Animals. Nord. Vet. Med. 14 Suppl. 1: 321-328.
 680. Orithel, T.C. 1970. Anatrinosomiasis in African monkeys. J. Parasit. 56: 982-985.
 - nematode in the nasal mucosa.
 681. Ormerod, W.E. 1976. Ecological effect of control of African trypanosomiasis. Science 191: 815-821.
 682. Ortlepp, R.J. 1962. Lungworms from South African antelopes. Onderstepoort J. Vet. Res. 29: 173.
 683. Osterhoff, D.R. and M.E. Keep. 1970. Natural variation in the blood proteins of white and black rhines. Lammergeyer no. 11: 50-53.
 684. Osterhoff, D.R., I.S. Ward-Cox and E. Young. 1972. Biochemical polymorphism in South African impala (Aepyceros melampus). Koedoe no. 15: 55-59.

685. Osterhoff, D.R., T. Young and I.S. Ward-Cox. 1970. A study of genetical blood variants in African buffalo. J. S. Afr. Vet. Med. Ass. 41: 33.
686. Paine, R. and G. Martinaglia. 1928. Tuberculosis in wild buck living under natural conditions. J.S. Afr. Vet. Ass. 1: 87-91.
687. Paling, R.W. et al. 1978. The prevalence of antibody to contagious caprine pleuropneumonia (Mycoplasma strain F38) in some wild herbivores and camels in Kenya. J. Wildl. Dis. 14: in press.
688. Parker, I.S.C. 1964. The Galana game management scheme. Bull. Epiz. Dis. Afr. 12: 21-31.
 - mentions Babesia sp. in orphaned elephants and treatment phenamidine.
 - deals with slaughter of elephants for ivory, ears, feet and meat.
689. Parsons, B.T. and D.L.W. Sheldrick. 1964. Some observations on biting flies (Diptera, Muscidae, sub-fam. Stomoxydinae) associated with black rhinoceros (Diceros bicornis). E. Afr. Wildl. J. 2: 78-85.
690. Pascal, D. 1971. (Giraffidae as zoo animals). Thesis. Ecole Nationale Veterinaire de Lyon. 136 pp. (in French). Abst. in Vet. Bull. (1972) 42: (7): 459-4054.
 - deals with anatomy, physiology, behaviour in the wild, capture, housing, feeding, reproduction, behaviour in captivity, diseases and immobilization.
691. Peirce, M.A. 1973. Haemoproteus balearicoe sp. nov. from crowned cranes Balearica pavonina pavonina and B. p. gibbericeps. Bull. Epiz. Dis. Afr. 21: 467-475.
 - schizonts in lungs illustrated.
692. Peirce, M.A. 1975. Ectoparasites from East African vertebrates. E. Afr. Wildl. J. 13: 153-156.
693. Peirce, M.A. and J.E. Cooper. 1977. Haematozoa of East African birds IV Redescription of Haemoproteus crumenium, a parasite of the marabou stork. E. Afr. Wildl. J. 15: 169-172.
694. Peirce, M.A. and J.E. Cooper. 1977. Haematozoa of East African birds. V. Blood parasites of birds of prey. E. Afr. Wildl. J. 15: 213-216.
695. Pereira, H.C. 1961. The disease problems of wild animals in relation to domestic stock. E. Afr. Agric. Forest. J. 27: 100-102.
696. Pereira, H.C. 1964. The ranching of wild game in Africa. Geogr. Mag.: 463-472.
697. Perry, J. 1972. Eland in Brazil. Oryx 11: 352-354.
 - a systemic insecticide is used to control the larvae of the botfly, Dermatobia hominis.
698. Perry, J.S. 1952. The growth and reproduction of elephants in Uganda. Uganda J. 16: 51-66.
699. Perry, J.S. 1953. Reproduction of the African elephant Loxodonta africana. Phil. Trans. Roy. Soc. Lond. Ser. B. Biol. Sci. 237: 93-149.
700. Perry, J.S. 1954. Some observations on growth and tusk weight in male and female African elephants. Proc.

Zool. Soc. Lond. 124: 97-104.

- ageing criteria.

701. Perry, J.S. 1964. The structure and development of the reproductive organs of the female African elephant. Phil. Trans. Roy. Soc. Serv. B. 248: 35-51.
702. Pester, F.R.N. and B.R. Laurence. 1974. The parasite load of some African game animals. J. Zool. Lond. 174: 397-406.
- parasites of animals in Kenya - gazelles, hartebeest, wildebeest, giraffe and zebra. Referred to worms encysted in walls of abomasum as immature Haemonchus!
703. Peterson, P.C. and W.T. Atyeo. 1977. An odd species of feather mite from flamingoes (Acarina: Allontidae). Acarologia, 18: 723-728.
704. Petrides, G.A. and W.G. Swank. 1965. Population densities and the range carrying capacity for large mammals in Queen Elizabeth National Park, Uganda. Zool. Africana. 1: 209-225.
705. Philippson, P. 1934. Domesticating the African elephant. Experiments in the Belgian Congo. Field, Lond. 163: 1527.
706. Pienaar, J.G., R.D. Bigalke, R.C. Tustin and T.W. Naude. 1964. The occurrence of co-cidiosis in impala - (Aepyceros melampus LICHTENSTEIN, 1812) J.S. Afr. Vet. Med. Ass. 35: 333.
707. Pienaar, U. de V. 1961. A second outbreak of anthrax amongst game animals in the Kruger National Park. Koedoe 4: 4-17.
- anthrax in roan (and perhaps other species).
708. Pienaar, U. de V. 1968. Capture and immobilizing techniques currently employed in South African national parks and reserves. In: F.B. Golley and H.K. Buechner (Editors). A practical Guide to the Study of the Productivity of Large Herbivores. Blackwell Scientific Publications Oxford and Edinburgh pp. 132-144.
709. Pienaar, U. de V. 1968. Recent advances in the field immobilisation and restraint of wild ungulates in South African national parks. Acta Zool. Pathol. Antverpiensia 46: 17-38.
710. Pienaar, U. de V. 1969. Observations on developmental biology, growth and some aspects of the population ecology of African buffalo (Syncerus caffer caffer Sparrman) in the Kruger National Park. Koedoe (J. for Sci. Res. in Nat. Parks of Rep. S. Afr.) No. 12: 29-52.
711. Pienaar, U. de V. 1969. The use of drugs in the field immobilisation and restraint of large wild mammals in South African national parks. Acta. Zool. et Pathol. Antverp. 48: 163-177.
712. Pienaar, U. de V. 1969. The use of drugs in the management and control of large carnivorous mammals. Koedoe no. 12: 177-183.
713. Pienaar, U. de V. 1970. A lasting method for marking identification of elephant. Koedoe no. 13: 123-126.
714. Pienaar, U. de V. and J.W. Niekerk. 1963. Elephant control in National Parks. Oryx 7: 35-38.
715. Pienaar, U. de V. J.W. van Niekerk, E. Young, P. van Wyk and N.F. Fairall. 1966. Neuroleptic narcosis of large wild

- herbivores in South African national parks with the new potent morphine analogues M-99 and M-183. J.S. Afr. Vet. Med. Ass. 37: 277-291.
716. Pienaar, U. de V., J.W. van Niekerk, E. Young, P. van Wyk and N.F. Fairall. 1966. The use of oripavine hydrochloride (M99) in the drug immobilization and marking of wild African elephant (Loxodonta africana Blumenbach) in the Kruger National Park. Koedoe 2: 108-124.
 717. Pini, A. and L.R. Hurter. 1975. African swine fever: an epizootiological review with special reference to the South African situation. J.S. Afr. Vet. Ass. 46: 227-232.
 718. Pinkerton, M.E. 1968. Shigellosis in the baboon. Lab. Anim. Care 18: 11-21.
 719. Pitchford, R.J. 1974. Some preliminary observations on schistosomes occurring in antelope in central southern Africa. Rhod. Vet. J. 4: 57-61.
 720. Pitchford, R.J. 1977. A check-list of definitive hosts exhibiting evidence of the genus Schistosoma Weiland, 1858 acquired naturally in African and the Middle East. J. Helminthol. 51: 229-252.
 - African hosts of schistosomes include chimpanzee, baboon, vervet monkey, warthog, zebra, buffalo, sitatunga, topi, kob, waterbuck, Bohor reedbuck, roan antelope, grey duiker, bushpig, giraffe, greater kudu, bushbuck, impala, hartebeest, eland, tsessebe, oribi, grysbuck, hippopotamus, serval cat, multimammate mouse, striped field mouse, swamp rat, marsh rat, Vlei rat, Nile rat and musk shrew.
 721. Pitchford, R.J. et al. 1973. Observations on the ecology of Schistosoma mattheei in portion of the Kruger National Park and surrounding area using a new quantitative technique for egg output. J.S. Afr. Vet. Ass. 44: 405-420.
 722. Pitchford, R.J. and P.L. le Roux 1955. Schistosomes from the impala (Aepyceros melampus) in the Eastern transvaal. Trans. Roy. Soc. Trop. Med. Hyg. 49: 292.
 723. Hitchford, R.J., P.S. Visser, U. de V. Pienaar and E. Young. 1974. Further observations on Schistosoma mattheei in the Kruger National Park. J.S. Afr. Vet. Ass. 45: 211-218.
 724. Player, I. 1967. Translocation of white rhinoceros in South Africa. Oryx 2: 137-154.
 725. Plowright, W. 1963. Some properties of strains of rinderpest virus recently isolated in East Africa. Res. Vet. Sci. 4: 96.
 - a mild strain from buffalo
 - findings discussed in relation to the current and expected epizootiology of rinderpest in cattle and game in East Africa.
 726. Plowright, W. 1963. The role of game animals in the epizootiology of rinderpest and malignant catarrhal fever in East Africa. Bull. Epiz. Dis. Afr. 11: 149-162.
 727. Plowright, W. 1965. Malignant catarrhal fever in East Africa. I. Behaviour of the virus in free-living populations of blue wildebeest (Gorgon taurinus). Res. Vet. Sci. 6: 56-68.
 728. Plowright, W. 1965. Malignant catarrhal fever in East Africa. II. Observations on wildebeest calves at the laboratory and contact transmission of the infection to cattle. Res. Vet. Sci. 6: 69-83.

729. Plowright, W. 1967. Malignant catarrhal fever in East African.III. Neutralising antibody in free living wildebeest. *Res. Vet. Sci.* 8: 129-136.
730. Plowright, W. 1968. Inter-relationships between virus infections of game and domestic animals. *E. Afr. Agric. Forest. J.* 33: 260-263.
731. Plowright, W. 1977. The vertical transmission of mammalian herpesviruses. *Proc. Soc. Gen. Microbiol.* 4: 62-63.
732. Plowright, W., r.d. Ferris and G.R. Scott. 1960. Blue wildebeest and the aetiological agent of bovine malignant catarrhal fever. *Nature* 188: 1167-69.
733. Plowright, W., and D.M. Jessett. 1971. Investigation of allerton-type herpes virus infection in East African game animals and cattle. *J. Hyg. Camb.* 69: 209-22.
734. Plowright, W. and B. McCulloch. 1967. Investigation on the incidence of rinderpest virus infection in game of Northern Tanganyika and Southern Kenya. *J. Hyg. Camb.* 65: 343.
735. Plowright, W., J. Parker and M.A. Pierce. 1969. The epizootiology of African swine fever in Africa. *Vet. Res.* 85: 668-674.
736. Pocock, R.I. 1910. On the specialized cutaneous glands of ruminants. *Proc. Zool. Soc. Lond.*: 840-906.
737. Pocock, R.I. 1918. On some external characters of ruminant Artiodactyla. Part. I. The Cephalophinae, Neotraginae, Oreotraginae and Madoquinae. *Ann. Mag. Nat. Hist.* 2: 426-435.
738. Poelma, F.G. 1975. Pneumocystis carinii infections in zoo animals. *Z. Parasitenk.* 46: 61-68.
 - The species include galagos, chimpanzee, fenne fox, tree hyrax and large-toothed hyrax (Procavia ruficeps). Causes of death other than Pneumocystis were recorded. Pseudotuberculosis was diagnosed in a galago and two large-toothed hyrax, hepatitis in the chimpanzee, gastritis with Candida in the tree hyrax, and stomach ulcers associated with nematodes in several of the large-toothed hyraxes.
739. Pollock, M.C. 1969. Some observations on game ranching in Southern Africa. *Biol. Conserv.* 2: 18-24.
740. Pomeroy, D.E. and M.H. Woodford. 1976. Drug immobilization of marabou storks. *J. Wildl. Manage.* 40: 177-179.
741. Posselt, J. 1963. The domestication of the eland. *Rhod. J. Agric. Res.* 1: 81-87.
742. Prasad, H. 1960. Studies on the coccidia of some mammals of the families Bovidae, Cervidae and Camelidae. *Z. f. Parasiten.* 20: 390-400.
743. Price, P.J., J. Greeff, and H.W. Weber. 1971. Pathological findings in the adrenal gland of chacma baboons - 160 consecutive cases. *J.S. Afr. Vet. Med. Ass.* 42: 39-43.
744. Purnell, R.E., M.A. Peirce and A. Musoke. 1970. Carnivores as vehicles for ticks carrying disease agents. A possible role of the large-spotted genet, Genetta tigrina in the epizootiology of East Coast Fever. *Trop. Anim. Health Prod.* 2: 87-89.
745. Purnell, R.E., B. Schiemann, C.G.D. Brown, A.D. Irwin,

- M.A. Ledger, B.C. Payne and A.S. Young. 1973. Attempted transmission of Theileria gorgonia Brocklesby and Vidler 1961 from blue wildebeest (Connochaetes taurinus) to cattle. Z. Tropenmed. Parasitol. 1973; 181-185.
746. Quinlan, J., G. De Kock and I.P. Marais. 1935. The operation of splenectomy in horses, cattle, sheep, goats, dogs and some South African antelopes: a summary of the results of 98 splenectomies. Onderstepoort J. Vet. Sci. Anim. Ind. 5: 273-303.
- common duiker, blesbuck. One blesbuck splenectomized was inoculated with bluetongue virus. It became an asymptomatic carrier. Inoculated with ovine heartwater, it died 23 days later. No reaction to Theileria mutans and Babesia bigemina. Anaesthetized with chloralhydrate with or without ether.
747. Rampton, C.S. and D.M. Jessett. 1976. The prevalence of antibody to infectious bovine rhinotracheitis in some game animals of East Africa. J. Wildl. Dis. 12: 2-6.
748. Randall, J.B. 1959. Game eradication. Vet. Rec. 71: 521-522.
749. Rapley, W.A. and K.G. Mehren. 1975. The clinical usage of Rompun (xylazine) in captive ungulates at the Metropolitan Toronto zoo. American Association of Zoo Veterinarians annual proceedings, San Diego, California. pp. 16-39.
750. Rapley, W.A., Kay G. Mehren, Charles J. Bonar, and Greg B. Topolie. 1975. Repair of a fractured mandible in a giraffe using rompun and M-99 immobilization. Proc. Am. Ass. Zoo Vet., San Diego, California.
751. Ratti, P. and K. Zeeb. 1972. Practical experience with xylazine in the immobilization of wild animals. Vet. Med. Nachrichten 3: 230-242.
752. Ratti, P. and K. Zeeb. 1972. Practical experience with rompun in the immobilization of game. Vet. Med. Rev. 226-238.
753. Rees, A.F. 1963. Some notes on elephants and their feeding habits. Tanganyika Notes No. 61: 205-208.
754. Reid, H.W., M.J. Burrridge, M.B. Pullan, R.W. Sutherst and E.B. Wain. 1970. Survey of trypanosome infections in domestic cattle and wild animals in areas of East Africa. 1. Introduction. Brit. Vet. J. 126: 622-626.
755. Reid, H.W., M.J. Burrridge, M.B. Pullan, R.W. Suthers and E.B. Wain. 1970. Survey for trypanosome infections in domestic cattle and wild animals in areas of East Africa. IV. Stercorarian trypanosome infections in cattle and wild animals in East Africa. Brit. Vet. J. 126: 642-647.
756. Reid, H.W. and L. Rowe. 1973. The attenuation of a Herpes-virus (malignant catarrhal fever virus) isolated from hartebeest (Alcelaphus buselaphus cokei). Res. Vet. Sci. 15: 144-146.
757. Reid, H.W. et al. 1975. Neutralizing antibody to herpes-viruses derived from wildebeest and hartebeest in wild animals in East Africa. Res. Vet. Sci. 18: 269-273.
758. Rementsova, M.M. 1963. Brucellosis in wild animals. XVII World Veterinary Congress. Hannover, pp. 593-596.
759. Renquist, D.M. et al. 1975. A natural case of Schistosoma mansoni in the chimpanzee (Pan troglodytes verus). Lab. Anim. Sci. 25: 763-768.

760. Retief, G.P. 1971. The potential of game domestication in Africa, with special reference to Botswana. J.S. Afr. Vet. Med. Ass. 42: 119-127.
761. Reuther, R.T. 1964. The bongo (Taurotragus eurycerus) - with notes on captive animals. Zool. Gart., Leipzig 28: 279-286.
762. Riemann, H.P. et al. 1975. Toxoplasma gondii antibodies in free-living African mammals. J. Wildl. Dis. 11: 529-533.
 - 20 of 157 positive by indirect haemagglutination test, including zebra, hippopotamus, elephant, waterbuck, lion, and rock hyrax.
763. Rietschel, W. and J. Senn. 1977. Control of anthrax in the Zoological Garden of Kabul by using a live vaccine. Tierarzt. Umschau 32: 36, 38-39.
 - The source of a number of cases of the disease in Kabul zoo was considered to be carcasses (in particular, camel) purchased from local butcher's shops operating with low standards of hygiene. A spore vaccine administered by means of a blowpipe completely eradicated the disease from the zoo over a two-year period in spite of the continued practice of purchasing meat from the local markets.
764. Riney, T. 1964. The economic use of wildlife in terms of its productivity and its development as an agricultural activity. First African Reg. Meeting on animal production and health. FAO, Rome.
765. Riney, T. 1964. Game fences. First FAO African Reg. meeting on animal production and health. FAO, Rome.
766. Riney, T. 1964. The relation of wildlife to domestic animals in husbandry and health. First FAO African Reg. meeting on animal production and health. FAO, Rome.
767. Riney, T. and G. Child. 1960. Breeding season and ageing criteria for the common duiker (Sylvicapra grimmia). Proc. First Fed. Sci. Congr.: 291-299.
768. Riney, T. and G.F.T. Child. 1964. Limitations of horn height as an index to ageing the common duiker (Sylvicapra grimmia). Arnoldia 1: 1-5.
769. Roach, R.W. and R.S. Windsor. 1967. Degenerative polymyopathies in East African domestic and wild animals. Vet.
770. Robin, E.D., J.M. Corson and G.J. Dammin. 1968. The respiratory dead space of the giraffe. Nature, Lond. 186: 24-26.
771. Robinetto, W.L. and A.L. Archer. 1971. Notes on ageing criteria and reproduction of Thomson's gazelle. E. Afr. Wildl. J. 9: 83-98.
772. Robinson, P.T. 1976. Immobilization of Felidae with M99. J. Zoo Anim. Med. 7: (2) 31.
773. Robson, J. et al. 1959. The isolation from an eland of a strain of rinderpest virus attenuated for cattle. Bull. Epiz. Dis. Afr. 7: 97-102.
774. Rodriguez, A.R. et al. 1977. Viral infections of the captive Kenya baboon (Papio cynocephalus): a 5 year epidemiological study of an outdoor colony. Lab. Anim. Sci. 27: 356-371.

775. Roettcher, D. and R.R. Hofmann. 1970. The ageing of impala from a population in the Kenya Rift Valley. E. Afr. Wildl. J. 8: 37-42.
776. Rollinson, D.H.L. 1956. Problems of rabies control in Africa. Bull. Epiz. Dis. Afr. 4: 7-16.
777. Rollinson, D.H.L. 1962. Brucella agglutinins in East African game animals. Vet. Rec. 74: 904.
778. Rossiter, L.W. and A.A.L. Albertyn. 1947. Foot-and-mouth disease in game. J.S. Afr. Vet. Med. Ass. 18: 16-19.
779. Roth, H.H. 1964. Misplacement of throat bots (Pharyngophorus africanus Brauer) in the African elephant. J.S. Afr. Vet. Med. Ass. 35: (3).
780. Roth, H.H. 1965. Lecture on "Eland Farming". University College Seminar. Published by Food and Agricultural Organization, Rome. FAO AM/MISC/66/14.
781. Roth, H.H. 1965. Observations on growth and ageing of warthog, Phacochoerus aethiopicus (Pallas, 1766). Z. Saugetierkunde 30: 367-380.
782. Roth, H.H. 1966. Productivity of game. Mammalia 30: 413-416.
783. Roth, H.H. 1967. A survey of brucellosis in game animals in Rhodesia. Bull. Epiz. Dis. Afr. 15: 133-142.
784. Roth, H.H. 1967. Disease problems associated with wildlife. Forest Comm. Ad Hoc party on wildlife management. FAO, Rome. FO/AFC/WL-67/13.
785. Roth, H.H. and W. Dalchow. 1967. Untersuchungen über den Wurmbefall von Antilopen in Rhodesien. Zeitschr. Ang. Zool. 54: 203-226.
786. Roth, H.H., M.A. Kerr and J. Posselt. 1972. Studies on the utilisation of semi-domesticated eland (Taurotragus oryx) in Rhodesia. 5. Reproduction and herd increase. Zeitschr. Tierzucht. Zuchtungsbiol. 89: 69-83.
787. Roth, H.H. and D.B. Vickers. 1966. Pseudotuberculosis in an antbear (Orycteropus afer) in Rhodesia. Brit. Vet. J. 122: 296-300.
- in captivity.
788. Round, M.C. 1964. A new species of Stephanofilaria in skin lesions from the black rhinoceros in Kenya. J. Helminthol. 38: 87-96.
789. Round, M.C. 1968. Check list of the helminth parasites of African Mammals. Commonwealth Bureau of Helminthology, St. Albans, U.K. Technical Communication No. 38.
790. Rowell, T.E. 1969. Intra-sexual behaviour and female reproductive cycles of baboons (Papio anubis). Anim. Behav. 17: 159-167.
791. Ruthe, H. 1961. Foot-diseases of elephants. Wiss. Z. Humboldt Univ. Math. Nat. R. 10: 471-516.
- in German, English summar.
792. Rutledge, J. 1969. Crocodile farm. Black Lechwe 7 (4): 23-25 (Pt. 1).
793. Rweyemamu, M.M. 1970. Probable occurrence of infectious bovine rhinotracheitis virus in Tanzania in wildlife and cattle. Nature 225: 738-739.

- Virus neutralization tests, using primary calf kidney cell monolayers, detected antibodies to the virus in serum samples from 38 of 52 adult buffalo (76%), one of three buffalo calves and 2 of 56 wildebeest (3.4%) from Masailand (north-eastern Tanzania), as well as 52 of 61 cattle (85%) at a local abattoir. Serum samples from eland, elephants, giraffes, Thomson's gazelle, impala and a warthog were all negative. In three of the buffalo and two of the cattle the neutralization titres were 1:64 - 1:128. The clinical disease has not yet been reported in East Africa.
- 794. Rweyemamu, M.M. 1974. The incidence of infectious bovine rhinotracheitis antibody in Tanzania game animals and cattle. *Bull. Epiz. Dis. Afr.* 22: 19-22.
- 795. Rweyemamu, M.M. et al. 1973. Observations on rabies in Tanzania. *Bull. Epiz. Dis. Afr.* 21: 19-27.
 - no evidence for a wildlife reservoir.
 - In 1966-70 the rabies cases comprised 88% dogs and 12% other spp. including 3.3% jackal, 1.4% hyaena and 0.3% fox.
- 796. Rweyemamu, M.M. et al. 1974. Malignant catarrhal fever virus in nasal secretions of wildebeest: a probable mechanism for virus transmission. *J. Wildl. Dis.* 10: 478-487.
- 797. Sachs, R. 1966. Notes on cysticercosis in game animals of the Serengeti. *East. Afr. Wildl. J.* 4: 152-153.
 - 300 antelopes were examined. Only armed tapeworm heads with a prominent double row of rostellar hooks were found.
- 798. Sachs, R. 1967. Live weights and body measurement of Serengeti game animals. *E. Afr. Wildl. J.* 5: 24-36.
- 799. Sachs, R. 1969. Finnenbefall bei ostafrikanischen Antilopen und die Verteilung der Muskelfinnen im Wildtier Körper. *Die Fleischwirtschaft* 49: 1331-1337.
- 800. Sachs, R. 1969. Serosal cysticercosis in East African game animals. *Bull. Epiz. Dis. Afr.* 17: 337-339.
- 801. Sachs, R. 1969. Über den Muskelfinnenbefall wildlebender Herbivoren des Serengetigebietes im Norden von Tanzania. *Z. Jagdwissenschaft.* 15: 151-157.
- 802. Sachs, R. 1969. Untersuchungen zur Artbestimmung und Differenzierung der Muskelfinnen ostafrikanischen Wildtiere. *Z. Tropenmed. Parasitol.* 20: 39-50.
- 803. Sachs, R. 1970. Cysticercosis of East African game animals. *J.S. Afr. Vet. Med. Ass.* 41: 79-85.
- 804. Sachs, R. 1970. Über den Befall ostafrikanischer Wildtiere mit parasitischen Fliegenlarven (Diptera, Oestridae) *Acta Tropica* 27: 281-290.
 - concludes that the wild animals were not a reservoir for myiasis in domestic animals.
- 805. Sachs, R. 1970. Zur Epidemiologie der Trichinellose in Africa. *Z. Tropenmed. Parasitol* 21: 116-126.
- 806. Sachs, R. 1976. Present and future parasite problems in African game. In Cherret, J.M.; Sagar, G.R. (Editors), *Origins of pest, parasite, disease and weed problems.* 18th Symp. Brit. Ecol. Soc., Bangor, 12-14.
- 807. Sachs, R. and J.G. Debbie. 1969. A field guide to the recording of parasitic infestation of game animals. *E. Afr. Wildl. J.* 7: 27-37.

808. Sachs, R., H. Frank and J.A. Bindernagel. 1969. New host records for Mammomonogrammus in African game animals through application of a simple method of collection. *Ve. Rec.* May 31st: 562-563.
809. Sachs, R., R.R. Hofmann and A.O. Sorheim. 1969. Stilesia infestation in East African antelopes. *Vet. Rec.* March 1: 233-234.
 - 50% of sheep livers were condemned for Stilesia in Kenya.
 - Survey in Serengeti:
 - Eland 12/12, Waterbuck (Common) 5/10, impala 3/20
 - immature and 15/37 mature; also 10% Cooperoides
 - hepatica often found together with Stilesia.
810. Sachs, R., G. Rack and M.H. Woodford. 1973. Observations on pentastomid infestation of East African game animals. *Bull. Epiz. Dis. Afr.* 21: 401-409.
811. Sachs, R. and C. Sachs. 1968. A survey of parasitic infestation of wild herbivores in the Serengeti region in Northern Tanzania and the Lake Rukwa region in southern Tanzania. *Bull. Epiz. Dis. Afr.* 16: 455-472.
812. Sachs, R., G.B. Schaller and J.R. Baker. 1967. Isolation of trypanosomes of the T. brucei Group from lion. *Acta Tropica.* 24: 2.
813. Sachs, R. and C. Staak. 1966. Evidence of brucellosis in antelopes of the Serengeti. *Vet. Rec.* 72: 857-858.
814. Sachs, R., C. Staak and C.M. Grocock. 1968. Serological investigations of brucellosis in game animals in Tanzania. *Bull. Epiz. Dis. Afr.* 16: 93-100.
815. Sachs, R. and Taylor. 1966. Trichinosis in a spotted hyaena (Crocuta crocuta) of the Serengeti. *Vet. Rec.* 78: .
816. Sadleir, R.M.F.S. 1966. Notes on reproduction in the larger Felidae. *Int. Zoo Yearbook* 6: 184-187.
817. Sadleir, R.M.F.S. 1969. The role of nutrition in the reproduction of wild mammals. *J. Reprod. Fert., Suppl.* no. 6: 39-48.
818. Sanford, S.E., P.B. Little and W.A. Rapley. 1977. The gross and histopathologic lesions of malignant catarrhal fever in three captive sika deer (Cervus nippon) in southern Ontario. *J. Wildl. Dis.* 13: 29-32.
 - one case associated with black wildebeest and two cases associated with sheep.
819. Savory, C.R. Game ranching. FAO, Rome. AM/MISC/66/11.
820. Savory, C.R. 1966. Game utilisation in Southern Rhodesia. FAO, Rome. AM/MISC/66/16.
821. Savory, J.C. 1966. Breeding and hand-rearing of the giraffe Giraffa camelopardalis at Columbus Zoo. *Int. Zoo Yearbook* 6: 202-204.
822. Savoy, 1965. Tuberculosis in a zoo collection of great apes. *Int. Zoo Yb.* 5: 189-192.
823. Schaefer, W.B. et al. 1973. A bacteriologic study of endemic tuberculosis in birds. *J. Hyg., Camb.* 71: 549-557.
 - in the Wildfowl Trust, Slimbridge, U.K.
 - mainly in Anatidae Mycobacterium avium types 1 and 2 were identified.

- 5% of mud and soil samples yielded M. avium. Methods for examining mud and soil are given.
- 824. Schiemann, B., B. Gwamaka and M. Kalunda. 1972. Pathogenicity in a buffalo (Syncerus caffer) of allerton type herpes virus isolated from a Tanzanian buffalo. J. Wildl. Dis. 8: 141-145.
- 825. Schiemann, B., W. Flowright and D.M. Jessett. 1971. Allerton-type Herpes virus as a cause of lesions of the alimentary tract in a severe disease of Tanzanian buffalos. Vet. Rec. 89: 17-22.
- 826. Schiemann, B. and C. Staak. 1971. (Brucella melitensis in impala (Aepyceros melampus)). Vet. Rec. March 27: 344.
- 827. Schindler, R. et al. 1969. Some veterinary aspects of the utilization of African game animals. Bull. Epiz. Dis. Afr. 17: 215-221.
 - discusses trypanosomiasis, theileriosis, MCF, rinderpest, foot-and-mouth disease, African horse sickness, bluetongue and African swine fever, rabies and Rift Valley fever.
- 828. Schindler, R., D. Mchlitz and B. Matson. 1976. Serological and immunological studies on Theileria lawrencei infections in cattle. Biannual Coll. Recent German Contributions Concerning Development through Animal Research 3: 20-42. Inst. for Sci. Coop., Tübingen, Fed. Rep. Germany.
 - Postulates origin of T. parva from T. lawrencei after introduction of cattle into Africa-perhaps in the region of Lake Victoria where vectors are active year round. T. lawrencei persists, even where T. parva has been eradicated because of its reservoir in buffalo and lesser ability, compared to T. parva, to stimulate sterile immunity.
- 829. Schmidt, G.D. and A.G. Canaris. 1968. Records of parasitic nematodes in Kenya. J. East Afr. Natur. Hist. Soc. 27: 155-156.
 - Of 101 fish, amphibians, reptiles, birds and mammals examined in Kenya, 56 were infested with one or more species of gastro-intestinal nematode. All are given as new records for Kenya and are listed with incidence and locality.
- 830. Schmidt-Nielsen, K. 1977. The physiology of wild animals. Proc. Roy. Soc. Lond. B199: 345-360.
 - discusses responses to extremes of temperature, water and salt requirements, energy requirements, and oxygen supply in varying environments.
- 831. Schmitts, J. 1964. Haematological studies in elephants. Vet. Med. Rev., Leverkusen No. 2: 87-95.
 - 4 elephants studied - 3 Indian, 1 African.
- 832. Schoop, U. 1977. Praomys (Mastomys) natalensis: an African mouse capable of sustaining persistent asymptomatic rabies infection. Annales de Microbiologie 128B: 289-296.
- 833. Schreuder, B.E.C. et al. 1977. Studies on Theileriidae (Sporozoa) in Tanzania. VIII Experiments with African buffalo (Syncerus caffer). Tropenmed. Parasit. 28: 291-408.
 - deals with T. lawrencei, T. mutans, Haematoxenus veliferus, Babesia bigemina and Anaplasma marginale as experimental or natural infections in buffalo.

834. Schulz, K.C.A. 1961. Ulcerating wound behind the shoulder of the black rhinoceros (Diceros bicornis) in the Hluhluwe and Mkuzi game reserves of Zululand. Afr. Wildl. 15: 55-59.
835. Schwan, Tom T. and Lou Sileo. 1978. Neottialges (Pelecanectes) evansi (Sarcoptiformes: Hypoderidae) parasitizing a white necked cormorant in Kenya. J. Med. Entomol. 14: 522.
836. Scott, G.B.D. and J.F. Keymer. 1975. The pathology of measles in Abyssinian colobus monkeys (Colobus guereza): a description of an outbreak. J. Pathol. 117: 229-233.
837. Scott, G.B.D. and J.F. Keymer. 1975. Ulcerative colitis in apes: a comparison with the human disease. J. Pathol. 115: 241-244.
838. Scott, G.R. 1975. Wildlife rinderpest. In: Wildlife Diseases. Ed. L.A. Page. Plenum Press, New York. pp. 245-258.
839. Scott, G.R., K.M. Cowan and R.I. Elliot. 1960. Rinderpest in impala. Vet. Rec. 72: 787.
- case report.
840. Scott, G.R. and J. Macdonald. 1962. Kenya camels and rinderpest. Bull. Epiz. Dis. Afr. 10: 495-497.
- no antibody in camels in areas involved in the 1960 epizootic. Records percentages of mortality in game animals - eland, warthog, greater and lesser kudu, buffalo, giraffe, bushbuck, impala, oryx.
841. Scott, P.P. 1968. The special features of nutrition of cats with observations on wild felidae nutrition in the London Zoo. In: Comparative Nutrition of Wild Animals. Ed. M.A. Crawford. Symp. Zool. Soc. London No. 21 Academic Press pp. 21-40.
842. Scott, W.M. 1966. Tsetse control by game destruction. Oryx 8: 244-248.
843. Seal, U.S. and E.E. Schobert. 1976. Baseline laboratory data for the bliesbok (Damaliscus dorcas phillipsi). J. Zoo. Anim. Med. 7 (2): 18-22.
844. Seal, U.S. and E.E. Schobert. 1976. Baseline laboratory data for the Grant's gazelle (Gazella granti). J. Zoo Anim. Med. 7 (1): 7-10.
845. Seal, U.S., E.E. Schobert and C.W. Gray. 1977. Baseline laboratory data for the Grant's zebra (Equus burchelli boehmei). J. Zoo Anim. Med. 8: pp.?
846. Seal, U.S. et al. 1976. Baseline laboratory data for the white rhinoceros (Ceratotherium simum). J. Zoo. Anim. Med. 7: 11-16.
847. Seal, U.S. et al. 1976. Hormonal contraception in captive female lions (Panthera leo). J. Zoo Anim. Med. 7(4): 12-20.
848. Sedgwick, C.J. 1973. M99-the zoo veterinarian's heavy clout. Mod. Vet. Pract. 54: 50-51.
849. Seitz, A. 1967. Einige Teststellungen zur Lebensdauer der Elefanten in Zoo Garten. Der Zoo. Garten 34: 31-55.
850. Seth-Smith, A.M.D. and I.S.C. Parker. 1967. A record of twin foetuses in the African elephant. B. Afr. Wildl. J. 5: 167.

851. Shifrine, M. and C.H. Domermuth, 1967. Contagious bovine pleuropneumonia in wildlife. Bull. Epiz. Dis. Afr. 15: 319-322.
 - serology in wildebeest, impala, eland, topi, waterbuck, buffalo, hippopotamus and zebra. Complement-fixing antibodies were found in wildebeest and hippopotamus only. Unsuccessful attempts were made to infect three wildebeest.
852. Shifrine, M. et al. 1970. Contagious bovine pleuropneumonia in African buffalo (Syncerus caffer). Bull. Epiz. Dis. Afr. 18: 201-205.
 - 2 buffalo were inoculated; both became infected and both died. One buffalo exposed to infected cattle, by contact, did not become infected.
853. Shoho, C. 1976. Description de Setaria equina theileriae n. sub. sp. des zebras et de Setaria equina defallai n. sub. sp. des chevaux et des anes du sud du Sahara. Ann. Parasitol. (Paris) 51: 589-599.
854. Shoho, C. 1976. Etude des Setaires parasites de Bubalis bubalis du Sud-Estasiatique et de Syncerus caffer d'Afrique orientale et centrale. Ann. Parasitol. (Paris) 51: 577-588.
855. Shone, D.K. and J.R. Philip. 1960. The susceptibility of the African bush pig (Potamochoerus porcus) to infection with Babesia trautmanni. J.S. Afr. Med. Ass. 31: 451-453.
 - clinically inapparent infection.
856. Short, C.E. 1969. Anaesthesia, sedation and chemical restraint in wild and domestic animals. Bull. Wildl. Dis. Ass. 5: 307-310.
 - includes data on Thomson's gazelle, Grant's zebra, African elephant, giraffe and ostrich using etorphine and on zebra, eland, kudu and lion with phencyclidine.
857. Short, D.J. 1968. Experience with cubed diets for laboratory primates. In: Comparative Nutrition of Wild Animals. Ed. M.A. Crawford. Symp. Zool. Soc. London. No. 21. Academic Press. pp. 13-19.
858. Short, R.V. 1962. The peculiar lungs of the elephant. New Scientist 16: 570-572.
859. Short, R.V. 1963. A syringe projectile for use with a bow and arrow. Vet. Rec. 75: 883-885.
860. Short, R.V. 1964. Anthrax in Chester Zoo. Vet. Rec. 76: 1040.
 - reference to anthrax in an African elephant. Discusses the elephant respiratory system.
861. Short, R.V. 1965. A capture syringe for use with a bow and arrow or crossbow. Zool. Africana 1: 248.
862. Short, R.V. and I.O. Buss. 1965. Biochemical and histological observations on the corpora lutea of the African elephant, Loxodonta africana. J. Reprod. Fert. 2: 61-67.
863. Short, R.V. and J.M. King. 1964. The design of a cross bow and dart for the immobilisation of wild animals. Vet. Rec. 76: 628-630.
864. Short, R.V. and C.A. Spinage. 1967. Drug immobilisation of the deffassa waterbuck. Vet. Rec. 81: 336-340.
865. Siegfried, W.R. 1971. The food of the cattle egret. J. Appl. Ecol. 8: 447-468.

866. Sikes, S.K. 1967. A survey of cardiovascular disease in free living wild mammals and birds with particular reference to the African elephant, Loxodonta africana. Thesis, London.
867. Sikes, Sylvia K. 1967. How to tell the age of an African elephant. Afr. Wildl. 21: 191-202.
868. Sikes, Sylvia K. 1968. Habitat disturbance and cardiovascular disease in animal populations, with special reference to the African elephant. Zeitschr. Sauget. 33: 150-160.
869. Sikes, Sylvia K. 1968. Habitat stress and arterial disease in elephants. Oryx 9: 286-292.
870. Sikes, Sylvia K. 1968. Observations on the ecology of arterial disease in the African elephant (Loxodonta africana) in Kenya and Uganda. Symp. Zool. Soc. Lond. no. 21: 251-273.
871. Sikes, Sylvia, K. 1968. Observations on the internal structure of the aorta in East African mammals, with particular reference to the klipspringer, gerenuk and hippopotamus. Zeitschr. Sauget. 33: 27-42.
872. Sikes, Sylvia K. 1968. The African elephant, Loxodonta africana: a field method for the estimation of age. Proc. Zool. Soc. Lond. 154: 235-248.
873. Sileo, L., C.H. Tuite and J.B.D. Hopcraft. 1977. Plumages and primary moult in lesser flamingoes. Wildfowl 28: 139-142.
874. Simpson, C.D. 1966. Tooth eruption, growth and ageing criteria in greater kudu, Tragelaphus strepsiceros Pallas. Arnoldia 2 (21): 1-12.
875. Simpson, C.D. 1971. Horn growth as a potential age criterion in some Southern African antelopes. J.S. Afr. Wildl. Manage. Ass. 1: 20-25.
876. Simpson, C.D. 1972. Some characteristics of Tragelaphine horn growth and their relationship to age in greater kudu and bushbuck. J.S. Afr. Wildl. Manage. Ass. 2 (2): 1-8.
877. Simpson, C.D. and W.H. Elder. 1969. Tooth cementum as an index of age in greater kudu. Arnoldia 4 (20): 1-10.
878. Simpson, C.F. et al. 1978. Encephalomyocarditis virus infection of captive elephants. J. Amer. Vet. Med. Ass. 171: 902-905.
- Loxodonta africana, captive in Florida.
879. Skinner, J.D. 1970. Game-ranching in Africa as a source of meat for local consumption and export. Trop. Anim. Health Prod. 2: 151-157.
880. Skinner, J.D. 1971. Productivity of the eland: an appraisal of the last five years' research. S. Afr. J. Sci. 67: 534-539.
881. Skinner, J.D. 1972. Eland vs beef. Afr. Wild Life. 26 (1): 409.
882. Skinner, J.D. 1973. An appraisal of the status of certain antelope for game farming in South Africa. Z. Tierzucht. Zuchtungsbiol. 90: 263-277.
883. Skinner, J.D. and J.H.M. Van Zyl. 1969. Reproductive performance of the common eland, Taurotragus oryx, in

- two environments. J. Reprod. Fert., Supp. 6: 319-322.
 - in highveld and bushveld in Southern Africa. Bushveld animals had better performance, probably related to nutrition.
884. Sloan, J.E.W. 1965. Helminths in ungulates. Int. Zoo Yb. 5: 24-28.
885. Smith, J.M.B. 1968. Diseases of hedgehogs. Vet. Bull. 38: 425-430.
886. Smith, N.S. and H.P. Ledger, 1965. A portable tripod and weighing assembly for large animals. J. Wildl. Manage. 29: 208-209.
887. Smuts, G.L. 1973. Ketamine hydrochloride-a useful drug for the field immobilization of the spotted hyaena (Crocuta crocuta). Koedoe 16: 175-180.
888. Smuts, G.L. 1973. Xylazine hydrochloride (Rompun) and the new retractible-barbed dart ("drop-out" dart) for the capture of some nervous and aggressive antelope species. Koedoe 16: 159-173.
889. Smuts, G.L. 1974. Age determination in Bruchell's zebra (Equus burchelli antiquorum) from the Kruger National Park. J.S. Afr. Wildl. Manage. Ass. 4: 103-115.
890. Smuts, G.L. 1975. An appraisal of naloxone hydrochloride as a narcotic antagonist in the capture and release of wild herbivores. J. Amer. Vet. Med. Ass. 167: 559-561.
891. Smuts, G.L., J.L. Anderson, and J.C. Austin. 1978. Age determination of the African lion. J. Zool., Lond. 185: 115-146.
892. Smuts, G.L. and B.R. Bryden. 1973. Some practical advantages of Cl581 (ketamine) for the field immobilization of larger wild felines, with comparative notes on baboons and impala. Lammergeyer 18: 1-14.
893. Smuts, G.L., J.J. Whyte and T.W. Dearlove. 1977. A mass capture technique for lions. E. Afr. Wildl. J. 15: 81-87.
 - used taped lion and hyaena calls.
 - darted with phencyclidine plus acetylpromazine or xylazine.
894. Snodgrass, D.R., L.H. Karstad and J.E. Cooper. 1975. The role of wild ruminants in the epidemiology of bovine petechial fever. J. Hyg., Camb. 74: 245-250.
895. Snyman, P.S. 1953. Rabies in the Union of South Africa. Bull. Epiz. Dis. Afr. 1: 94-104.
 - evidence for two types of rabies - mongoose and canine types.
 - discusses control by gassing dens.
896. Sobulz, K.C.A. and E.B. Kluge. 1960. Dermatitis in the black rhinoceros (Diceros bicornis) due to filariasis. J.S. Afr. Vet. Med. Ass. 31: 265.
897. Solberg, I.M. and J.A. Aloo. 1975. Viral isolates from Ixodid ticks of wild animals in Kenya. In: Wildlife Diseases. Ed. L.A. Page. Plenum Press, New York. pp. 413-422.
898. Soma, L.R. 1971. The capture and restraint of wild animals. In: Textbook of veterinary Anesthesia. Eds Harthoorn, A.M. Williams and Wilkins Co., Baltimore. pp. 404-439.

899. Spearman, R.I.C. 1970. The epidermis and its keratinisation in the African elephant (Loxodonta africana). Zool. Africana. 5: 327-338.
900. Spinage, C.A. 1962. Rinderpest and faunal distribution patterns. Afr. Wild Life 16: 55-60.
901. Spinage, C.A. 1967. Ageing the Uganda defassa waterbuck Kobus defassa ugandae Neumann. E. Afr. Wildl. J. 5: 1-17.
902. Spinage, C.A. 1969. Reproduction in the Uganda Defassa waterbuck, Kobus defassa ugandae Neumann. J. Reprod. Fert. 18: 445-457.
903. Spinage, C.A. 1971. Geratodontology and horn growth of the impala (Aepyceros melampus). J. Zool. 164: 209-225.
904. Spinage, C.A. 1972. Age estimation of zebra. E. Afr. Wildl. J. 10: 273-277.
905. Spinage, C.A. 1973. A review of the age determination of mammals by means of teeth, with special reference to Africa. E. Afr. Wildl. J. 11: 165-187.
906. Sserunjogi-Ssebalija, J. 1976. Environmental insecticide residues from tsetse fly control measures in Uganda. Trace Contaminants of Agriculture, Fisheries and Food in Developing Countries. pp. 69-71.
907. Stanley-Price, M. 1976. Feeding studies of oryx on the Galana Ranch. Afr. Wildl. Leadership Found. News 11: (3): 7-11.
- comparisons with sheep and cattle.
908. Steel, J.H. and P.V. Arambulo III. 1975. Trichinosis. A world problem with extensive sylvatic reservoirs. Int. J. Zoonoses. 2 (2): 55-75.
- In Kenya trichina were found in 1/4 lions, 1/4 leopards, 1/9 servals, bushpig, 10/23 spotted hyaena, 1/2 striped hyaena, 0/3 aardwolf, 1/2 side striped jackal, 0/13 black backed jackal, 2/30 domestic dogs, 0/83 viverrids, no mustelids, and none of about 2000 rodents.
909. Stevenson, Hamilton J. 1912. The relation between game and tsetse flies. Bull. Ent. Res. 2: 113.
910. Stewart, D.R.M. 1964. Bull. Epiz. Dis. Afr. 12: 39-42.
- summarizes rinderpest in game in Kenya 1960-1962.
911. Stoltz, L.P. 1973. Mechanical capture techniques for wild primates. In: The capture and Care of Wild Animals. E. Young, Editor. Human and Rosseau. Cape Town. pp. 110-115.
912. Stone, S.S. and W.P. Heuschele. 1965. The role of the hippopotamus in the epizootiology of African swine fever. Bull. Epiz. Dis. Afr. 13: 23-28.
- no evidence of involvement.
913. Stott, K. 1959. Giraffe intergradation in Kenya. J. Mammal. 40: 251.
914. Strong, J.P., J.H. Miller and H.C. McGill. 1965. Naturally occurring parasitic lesions in baboons: The baboon in medical research. Univ. of Texas Press, Austin: pp. 503-512.
915. Stunkard, J.A. et al. 1975. Shrews: a review of the diseases, anomalies and parasites. Lab. Anim. Sci. 25: 723-734.

916. Swanepoel, R., N.K. Blackburn, S. Efstratiou and J.B. Condry. 1978. Studies on Rift Valley fever in some African murids (Rodentia: Muridae). J. Hyg. Camb., 80: 183.
917. Sweatman, G., J.B. Walker and J.A. Bindernagel. 1969. Stages in the development of Choriopsoroptes kenyensis. Gen. Rt. sp. n., a body mange mite from captive buffalo. J. Parasitol. 55: 1298-1310.
918. Swynnerton, C.F.M. 1936. The tsetse flies of East Africa. A first study of their ecology with a view to their control. Trans. Roy. Entomol. Soc. Lond. 84: 579.
919. Symes, G.B. and Memahon. 1937. The food of tsetse flies as determined by the precipitin test. Bull. Entomol. Res. 28: 31-42.
920. Syngé, B.A. 1978. Brain biopsy for the diagnosis of heartwater. Trop. Anim. Hlth. Prod. 10: 45-48.
921. Talbot, L.M. 1965. A survey of past and present wildlife research in East Africa. (Bibliography). E. Afr. Wildl. J. 3: 61-85.
922. Talbot, L.M. 1966. Wild animals as a source of food. U.S. Dept. Interior, Bureau Sport Fisheries and Wildlife, Sp. Sci. Report. Wildlife 98. Washington, D.C. 20402. U.S. Govt. Printing House.
923. Talbot, Lee M. et al. 1965. The meat production potential of wild animals in Africa. A review of biological knowledge. Tech. Communication 16. Commonwealth Agricultural Bureaux, Farnham Royal, Bucks, England 42 pp. - includes data on reproduction.
924. Talbot, L.M. and J.S.G. McGulloch. 1965. Weight estimations for East African mammals from body measurements. J. Wildl. Manage. 29: 84-89.
925. Tarshis, I.B. and L.R. Penner. 1960. Treatment of ectoparasites in captive wild animals. Int. Zoo Yb. 2: 107-109.
926. Tate, C.L. et al. 1973. Focal epithelial hyperplasia in the oral mucosa of a chimpanzee. J. Amer. Vet. Med. Ass. 163: 619-62. - Papovavirus etiology.
927. Tawfik, M.S., O.M. Hamed and R. El-Karamani. 1977. Leptospirosis in Egyptian rodents. Zentralbl. Vet. Med. B 24: 728-732.
928. Taylor, C.R. 1968. The minimum water requirements of some East African bovids. In: Comparative Nutrition of Wild Animals. Ed. M.A. Crawford. Symp. Zool. Soc. Lond. No. 21 Academic Press, pp. 195-206. - in captivity.
929. Taylor, J. 1968. Salmonella in wild animals. Symp. Zool. Soc. Lond. 24: 51-73.
930. Taylor, W.P. and R.M. Watson. 1967. Studies on the epizootiology of rinderpest in blue wildebeest and other game species of Northern Tanzania and Southern Kenya 1965-67. J. Hyg. Camb. 65: 53.
931. Theiler, G. 1962. African ticks: The complexity of their host-encounter relationship: Disease control. 2nd Meeting FAO/OIE Expert Panel on Tick-borne Diseases of livestock. Cairo (FAO Meeting Report AM 1962/10, pp. 45-52).

932. Theiler, G. 1962. The arthropod parasites (Iodoidea) in Africa south of Sahara. Project S 9958. Rept. to Dri. vet. Serv., Onderstepoort, South Africa.
933. Thoen, O. et al. 1977. Mycobacteria isolated from exotic animals. J. Am. Vet. Med. Ass. 170: 987-990.
934. Thoen, O. et al. 1977. Mycobacterium bovis infection in baboons (Papio papio). Arch. Path. Lab. Med. 101: 291-293.
935. Thomas, S.E., L.D. Dobson. 1977. Some protozoan parasites in wild birds from the vicinity of Onderstepoort 1973-1974. Final Report. Agricultural Research. Dept. Agric. Tech. Services, Pretoria, South Africa. 1975+ 130.
936. Thomas, A.D. and N.R. Reid. 1944. Rinderpest in game: Onderstepoort J. Vet. Sc. & Anim. Husb. 20: 7.
937. Thomson, A.L. 1964. Birds associated with elephant and hippopotamus. Auk. 81: 436.
938. Thorburn, J.A. and A.D. Thomas. 1940. Tuberculosis in a Cape kudu. J.S. Afr. Vet. Med. Ass. 11: 3-10.
939. Thornton, H. 1976. Brucella hygroma in an eland. Rhod. Vet. J. 7: 64.
940. Thurlbeck, W.M., C.A. Bates, E.M. Mankiewicz and R.M. Laws. 1965. Chronic pulmonary disease in wild buffaloes (Syncerus caffer) in Uganda. Amer. Rev. Resp. Dis. 92: 801-805.
941. Thurston, June P. 1972. Heavy infestation of pentastomid mites in a bush genet. E. Afr. Med. J. 49: 791-792.
942. Thurston, June P. 1972. Worm egg output of herbivores in Karamoja, Uganda. Bull. Epizoot. Dis. Afr. 20: 31-34.
943. Tones, J. 1850. On the blood-coloured exudation from the skin of the hippopotamus. Proc. Zool. Soc. Lond. 18: 160-162.
944. Travassos Santos Dias, J.A. 1963. The importance of warthog (Phacochoerus aethiopicus) in the epidemiology of the relapsing fever or tick fever in Mozambique. S. Afr. J. Sci. 59: 573-574.
945. Tremlett, J.G. 1964. Observations on the pathology of lesions associated with Stephanofilaria dinniki Round 1964 from the black rhinoceros. J. Helminthol. 38: 171-174.
946. Treus, V. and D. Kravchenko. 1968. Methods of rearing and economic utilisation of eland in the Askaniya-Nova zoological park. Symp. Zool. Soc. Lond. no. 21: 395-415.
- care, feeding, milk production and analysis, reproduction, feeding eland calves on milk of domestic cows, growth, weights and measurements, organ weights.
947. Treus, V.D. and M.V. Lobanov. 1971. Acclimatisation and domestication of the eland Taurotragus oryx at Askaniya-Nova Zoo. Ist. Zoo Yearbook 11: 147-156.
948. Turner, W.Y. 1925. The morphology of Filaria sagitta v LINSTOW, 1907, from the heart of Tragelaphus sylvaticus in Nyassaland. J. Helminthol. 3: 15.
949. Twigg, G.I., Sylvia K. Sikes and D.M. Hughes. 1970. Evidence of leptospirosis in some large East African mammals. E. Afr. Wildl. J. 8: 197-198.

- agglutinins demonstrated in 3/17 elephant, 1/5 buffalo, 3/3 giraffe, 1/2 eland and 1/1 Thomson's gazelle. Leptospire were demonstrated in one lion by silver impregnation of kidney sections.
- 950. Ulbrich, F. and H. Fischer. 1967. The chromosomes of the Asiatic buffalo (Bubalus bubalis) and the African buffalo (Syncerus caffer). Z. Tierzucht. Zuchtungsbiol. 83: 119.
- 951. Urquhart, G.M., D. Hay, D.R.P. Zaphiro and C.A. Spinage. 1960. Some internal parasites of game animals in Kenya. E. Afr. Agric. Forest. J. 26: 11-20.
- 952. U.S. Dept. Health. 1972. Chimpanzee-associated hepatitis. Morbidity and Mortality Weekly Reports 21: 343, 348.
- human hepatitis.
- 953. Usenik, E.A. et al. 1977. Oesophageal fistulation of topi and wildebeest. E. Afr. Wildl. J. 15: 207-212.
- 954. Uspenskii, G.A. and A.D. Saglanskii. 1962. Domestication of the eland in the U.S.S.R. (Summary). Rhod. J. Agric. Res. 1: 87.
- 955. Van den Berghe, L. 1955. La theileriose des eland. (Theileriosis of elands). Fol. Scient. Afr. Centr. 1: 21.
- Author's summary: T. mutans parasites virtually indistinguishable from T. parva of elands to which both infections this antelope is probably refractory, have been found in two elands (Taurotragus oryx pattersonianus) which came from Kenya and have been under observation since 1952 at the Zoological Experimental Station of Tshibati. The eland of Africa should therefore be considered as a possible reservoir of the causal agent of East Coast Fever.
- 956. Van der Gaag, J. et al. 1973. Diabetes melletus with pancreatic atrophy in antelopes in the Amsterdam Zoo. Zentralbl. Vet. Med. A. 20: 843-854.
- in scimitar-horned oryx and nilgai.
- 957. Vanderplank, F.L. 1941. A note on the relation between the virulence of Trypanosoma rhodesiense towards rats and the normal blood temperature of its mammalian host. Trans. Roy. Soc. Trop. Med. Hyg. 35: 43.
- refers also to anthems.
- 958. Vanderplank, F.L. 1947. Seasonal and annual variation in the incidence of trypanosomiasis in game. Ann. Trop. Med. Parasitol. 41: 365-374.
- 378 animals of 39 species were examined in Tanganyika. No age or sex differences were found. The highest prevalence was found in the rainy seasons. Blood meals of tsetse were classified by measuring erythrocytes, and diameters are given for all the common game species.
- 959. Van der Westhuisen, O.P. 1938. A monograph of the helminth parasites of the elephant. Onderstepoort J. Vet. Res. 10: 49-190.
- 960. Van Wierkerk, J.W. 1963. Immobilising drugs used in the capture of wild animals in Kruger National Park. J.S. Afr. Vet. Med. Ass. 34: 568.
- 961. Van Rensburg, R.D.J. 1962. The humane coyote-getter. Fauna and Flora, Transvaal. 13: 8-18.

962. Van Rensburg, R.D.J. 1965. Preliminary report on the "Humane Coyote-Getter" for the control of the black backed jackal Thos mesomelas in the Transvaal. Zool. Africana 1: 193-198.
963. Van Rooye, G.D. and P.J. De Beer. 1973. A retractable-barb needle for drug darts. Koedoe no. 16: 155-158.
964. Vareschi, Ekkehard. 1978. The ecology of Lake Nakuru (Kenya). 1. Abundance and feeding of the lesser flamingo. Oecologia (Berl.) 32: 11-35.
965. Vaughan-Jones, T. 1953. Notes on the rinderpest fence and cordon. Bull. Epiz. Dis. Afr. 1: 286-290.
- 9,735 animals were killed along the Tanganyika - N. Rhodesia border, 1941-1951, along a patrolled fence 167 miles long.
966. Verhaart, W.J. and W. Kramer. 1958. The pyramid in the medulla and the cord of the elephant. Acta. Morph. Neerl. Scand. 2: 174-181.
967. Verster, A. 1962. Hydatidosis in the Republic of South Africa. S. Afr. J. Sci., 58: 71-73.
968. Verster, A. 1965. Taenia solium in the chacma baboon (Papio ursinus). J.S. Afr. Vet. Med. Ass. 36: 580.
969. Vice, T.E., H.A. Britton, J.A. Ratner and S.S. Kalter. 1966. Care and raising of newborn baboons. Lab. Anim. Care. 16: 12-22.
970. Vice, T.E., M.E. Pinkerton, F.A. Fear and S.S. Kalter. 1968. An outbreak of tuberculosis in a group of experimental baboons. Primates 9: 105-122.
971. Voelker, J. et al. 1975. On the epidemiology of paragonimiasis in man and in animals in Nigeria, West Africa. Vet. Med. Rev. No. 1/2: 161-175.
- found in civet.
972. Wackernagel, H. 1968. Substitution and prefabricated diets for zoo animals. In: Comparative Nutrition of Wild Animals, Ed. M.A. Crawford. Symp. Zool. Soc. London No. 21 Academic Press. pp. 1-12.
- diets for herbivores, omnivores, carnivores, fish-eaters, cage birds, and poultry used in Basel Zoo.
973. Waghela, S. 1978. Brucellosis in Kenya. Kenya Vet. 1: 3-7.
- deals with livestock, humans and wildlife. Antibodies reported in buffalo, eland, hartebeest, wildebeest, giraffe and baboon.
974. Walker, A.R. and F.G. Davies, 1971. A preliminary survey of the epidemiology of bluetongue in Kenya. J. Hyg., Camb. 69: 47-60.
- antibodies were found in hartebeest, wildebeest, impala, eland, buffalo, topi, reedbuck and Thomson's gazelle.
975. Walker, D.H., H. Wulff, J.V. Lange and F.A. Murphy. 1975. Comparative pathology of Lassa virus infection in monkeys, guinea pigs, and Mastomys natalensis. Bull. World Health Org. 52: 523-534.
976. Walker, Jane B. 1962. Notes on the common tick species of East Africa. Cooper, McDougall and Robertson (E.A.), Nairobi.

977. Wallach, J.D. 1970. Nutritional diseases of exotic animals. J. Amer. Vet. Med. Ass. 157: 583-599.
- includes among examples, excessive hoof growth in duiker, diaphragmatic hernia in leopard, curled toe paralysis in an ostrich, necrotic stomatitis in boas, steatitis in lion, and muscular dystrophy in ruminants and zebra.
978. Wallach, J.D. 1977. Erysipelas in two captive diana monkeys. J. Amer. Vet. Med. Ass. 171: 979-980.
979. Wallach, J.D., R. Frueh and M. Lentz. 1967. The use of M99 as an immobilizing and analgesic agent in captive wild animals. J. Amer. Vet. Med. Ass. 151: 870-876.
980. Wallach, J.D. and M.S. Silberman. 1977. Foot care for captive elephants J. Amer. Vet. Med. Ass. 171: 906-907.
981. Wankel, B. and H. Schulze. 1976. Veterinary science and wild animal research. Deut. Tieraerztl. Wochenschr. 83: 498-508.
982. Watson, P.F. 1976. Electroejaculation, semen characteristics and semen preservation of the brindled gnu. J. Reprod. Fert. 47: 123-126.
983. Watson, P.F. and F. D'Souza. 1975. Detection of oestrus in the African elephant (Loxodonta africana). Theriogenology 4: 203-209.
984. Watson, P.F. and J.M. Hime. 1976. Semen collection from the brindled gnu. Int. Zoo Yb. 16: 174-175.
985. Watson, R.M. 1966. Game utilization in the Serengeti: Preliminary investigations, Part II. Wildebeest. Brit. Vet. J. 122: 18-27.
986. Wegener, J. and J.M. Gathuma. 1975. Role of the marabou stork (Leptoptilos crumeniferus) in Kenya in the spread of echinococcosis from the abattoir. Tropenmed. Parasit. 26: 43-47.
987. Weinbren, M.P. and P.J. Mason. 1957. Rift Valley Fever in a wild field rat (Arvicanthis abyssinicus): a possible natural host. S. Afr. Med. J. 31: 427-430.
988. Weiss, K.E. 1957. Rift Valley fever: a review. Bull. Epiz. Dis. Afr. 5: 431-458.
989. Weitz, B. 1952. The antigenicity of sera of man and animals in relation to the preparation of specific precipitation antisera. J. Hyg. 50: 275-294.
990. Weitz, B. 1956. Identification of blood meals of blood sucking arthropods. Bull. World Health Org. 15: 475-490.
991. Weitz, B. and J.P. Glasgow. 1956. The natural hosts of some species of Glossina in East Africa. Trans. Roy. Soc. Trop. Med. Hyg. 50: 593-612.
- 852 meals 43% warthog (mainly)
38% Bovidae
- | species | meals | most favoured host |
|-----------------------|-------|--------------------|
| <u>G. swynnertoni</u> | 228 | 42% warthog |
| <u>G. austeni</u> | 187 | 88% bush pig |
| <u>G. pallidipes</u> | 68 | 63% bushbuck |
992. Weitz, B. and C.H.N. Jackson. 1955. Serological identification of blood meals from Glossina morsitans. Bull. Entomol. Res. 46: 531.

993. Weitz, B., W.P. Langridge, P. Napier Bax and F. Lee Jones. 1958. The natural host of G. longepennis and of some other tsetse flies in Kenya. CTA. (ISCTR) 7th meeting Brussels 1958. Publication No. 41: 303-312.
- | - species | meals | most favoured host |
|------------------------|-------|--------------------|
| <u>G. swynnertonii</u> | 203 | 54% warthog |
| <u>G. longipennis</u> | 336 | 74% rhinoceros |
994. Wells, E.A. 1962. A disease resembling bluetongue occurring in topi (Damaliscus korrigum) in the Queen Elizabeth National Park, Uganda. Vet. Rec. 74: 1372.
- Senegal hartebeest.
995. Wells, E.A. and W.H.R. Lumsden. 1968. Trypanosome infections of wild mammals in relation to trypanosome disease of man and his domestic stock. Symp. Zool. Soc. Lond. 24: 133-145.
996. Wells, E.A. and W.H.R. Lumsden. 1971. Trypanosomiasis. In: Parasitic Diseases in Wild Mammals. Ed. by J.W. Davis and R.C. Anderson. Iowa State Univ. Press, Ames, pp. 309-325.
997. West, B., P. Wilson and C. Hatch. 1977. Aleurostrongylus abstrusus infection in the cheetah. J. Helmintho. 51: 210-211.
- in a zoo. Includes demonstration of Lymnaea truncata as an intermediate host and ineffectiveness of treatment with levamisole diethylcarbamazine citrate.
998. Wetzler, T.F. 1970. Pseudotuberculosis. In: Infectious Diseases of Wild Mammals. Ed. by J.W. Davis et al. Iowa State Univ. Press, Ames, pp. 224-235.
- In Africa the disease has been reported in wild animals in Belgian Congo, Morocco and Algeria. The host list includes the following: tree hyrax, lion, baboon, bushbaby, chimpanzee, vervet, Brazza and patas monkeys.
999. White, R.J., L. Simmons and R.B. Wilson. 1972. Chickenpox in young apes: clinical and laboratory findings. J. Amer. Vet. Med. Ass. 161: 690-692.
1000. Wikse, S.E. et al. 1970. Candidiasis in simian primates. Lab. Anim. Care. 20: 957-963.
1001. Wilde, J.K.H. Rinderpest in some African wild mammals. J. Comp. Path. & therapeutics 58: 64-72.
1002. Wildon, D.E., R.C. Bartsch, R.D. Bigalke, Shan E. Thomas. 1974. Observations on mortality rates and disease in roan and sable antelope on nature reserves in the transvaal. J.S. Afr. Wildl. Mgmt. Ass. 4: 203-206.
- mention of chlamydiosis, babesiosis, pneumocystosis (Pneumocystis carni) and cytauxzoonosis.
1003. Wilson, D.E. et al. 1977. Determination of feeding preferences in wild ruminants from trocar samples. J. Wildl. Manage. 41: 70-75.
1004. Wilson, S.G. 1954. Rhipicephalus hurti W. SP. (Ixodidae) from Kenya game and domestic animals. Parasitol. 44: 277-284.
1005. Wilson, V.J. 1967. The use of oripavine hydrochloride (M99) in the drug-immobilisation of duiker. Arnoldia 1: 1-6.
1006. Windsor, R.S. and W.A. Ashford. 1972. Salmonella infection

in the African elephant and the black rhinoceros. Trop. Anim. Health. Prod. 4: 214-219.

1007. Wink, M. and G.F. Bennet. 1976. Blood parasites of some birds from Ghana. J. Wildl. Dis. 12: 587-590.
1008. Winkler, W.G. and N.B. Gale. 1970. Tuberculosis. In: Infectious Diseases of Wild Mammals. Ed. J.W. Davis et al. Iowa State University Press, Ames, pp. 236-248
1009. Winter, W.H. 1964. Elephant behaviour. E. Afr. Wildl. J. 2: 163-164.
1010. Woodford, M.H. 1972. Tuberculosis in the African buffalo (Syncerus caffer) in the Queen Elizabeth National Park, Uganda. A thesis. Univ. Zurich. 110 pp.
1011. Woodford, M.H. 1973. Reduction of a rectal prolapse in a wild lioness. J. Wildl. Dis. 9: 178-181.
1012. Woodford, M.H. 1974. Postmortem procedures for wildlife veterinarians and field biologists. Project working document No. 4. KEN: 71/526. FAO, Rome. 40 pp.
1013. Woodford, M.H. and R. Sachs. 1973. The incidence of cysticercosis, hydatidosis and sparganosis in wild herbivores of the Queen Elizabeth National Park, Uganda. Bull. Epiz. Dis. Afr. 21: 265-271.
1014. Woodford, M.H. et al. 1976. Report of the veterinary section of the Kenya wildlife management project (Ken/71/526) Proj. Working Document No. 10. FAO, Rome. 74 pp.
 - deals mainly with parasites found at meat inspection of slaughtered wildebeest, eland, hartebeest and impala, Includes data on prevalence of lice, warbles, hippoboscids, oestrid larvae, lungworms, larval tapeworms (Taenia sp. and Echinococcus sp.) sarcosporidiosis, trematodes in liver and rumen, Stilesia sp., Cooperoides hepatica, pentastomes and gastrointestinal nematodes.
1015. Woodford, M.H. 1972. The use of gallamine triethiodide as chemical immobilizing agent for the Nile crocodile (Crocodilus niloticus). E. Afr. Wildl. J. 10: 67-70.
1016. Woolf, A., H.R. Hays, W.B. Allen and J. Swart. 1973. Immobilization of wild ungulates with etorphine HCL. J. Zoo Anim. Med. 4 (4): 16-19.
 - includes data on eland and zebra.
1017. Wurster, Doris H. and Benirschke, Kurt. 1969. Ancient migratory routes and present day karyology of the Bovinae. Mammalian chromosomes. Newsletter 10: 57.
 - The subfamily Bovinae (family Bovidae) includes three tribes, the Strepsicerotini, the Boselaphini and the Bovini. Development of this group occurred at a comparatively late date with the first fossil representatives appearing in the Old World in the Miocene. By the end of the Pleistocene most forms had disappeared from Europe and migrated to Africa and southern Asia. All species studied cytogenetically so far have a diploid number of 60 excepting those that have migrated fairly far southward as for example the gaur (2n=58), the African buffaloes (2n=54 and 52), the Murrah buffalo (2n=48), the sitatunga (2n=30), the nilgai (2n=46), etc. The southerly dispersion of these species from their origin in Eurasia is cytogenetically accompanied by a decreased diploid number and an increased number of meta-centric elements. The fundamental number for the whole subfamily (with the exception of the four-horned antelope) ranges only from 58 to 62, and the almost exclusive use of

the Robertsonian fusion mechanism of karyotype evolution is apparent. The stepwise progression of the reduction in diploid number is best seen in the tribe Bovini. Correlation of fossil migratory routes with karyology of extant species suggests that the karyotype of the primitive Bovinae consisted of 58 or more acrocentric autosomes.

1018. Yeh, Liang-Sheng. 1956. On a collection of helminths from Thomson's gazelle (Gazella thomsoni) from Tanganyika. J. Helminth. 29: 203-28.
1019. Yeoman, G.H. and J.B. Walker. 1967. The Ixodid ticks of Tanzania. Commonwealth Inst. Entomol., London 214 pp.
1020. York, W. 1975. Fentanyl citrate for wild animal capture. J. Zoo Anim. Med. 6: 14-15.
1021. York, W., C. Kidder and C. Durr. 1973. Chemical restraint and castration of an adult giraffe. J. Zoo. Anim. Med. 4: 17-21.
1022. York, W. and K. Huggins. 1972. Rompun (Bay Va 1470). J. Zoo Anim. Med. 3: 15-17.
1023. Young, A.S., D. Branagan, C.G.D. Brown, M.J. Burrige, M.P. Cunnigham and R.E. Purnell. 1973. Preliminary observations on theilerial species pathogenic to cattle isolated from buffalo (Syncerus caffer) in Tanzania. Brit. Vet. J. 129: 383-389.
1024. Young, A.S. et al. 1975. Phagocytosis of Trypanosoma (Naomonas) congolense by circulating macrophages in the African buffalo. Res. Vet. Sci. 19: 108-110.
1025. Young, A.S., J.G. Grootenhuys, C.D. Kimber, G.K. Kanhai and D.A. Stagg. 1976. Isolation of a Theileria species from eland (Taurotragus oryx) infective for cattle. Tropenmed. Parasit. 27: 185-194.
1026. Young, E. 1965. Suspected case of tetanus in a waterbuck (Kobus ellipsiprymnus). J.S. Afr. Vet. Med. Ass. 36: 580.
1027. Young, E. 1966. A suitable milk substitute for the aardvark and echidna. Int. Zoo Yb. 6: 68-69.
1028. Young, E. 1966. Muscle necrosis in captive red hartebeest (Alcelaphus buselaphus). J.S. Afr. Vet. Med. Ass. 34: 101.
1029. Young, E. 1966. Notes on the blood composition of the red hartebeest Alcelaphus buselaphus. Int. Zoo Yearbook 6: 291-292.
1030. Young, E. 1966. Nutrition of the hippopotamus. Afr. Wild Life. 20: 165.
1031. Young, E. 1966. Nutrition of wild South African felines and some viverrids. Afr. Wild Life. 20: 293-299.
1032. Young, E. 1966. A preliminary report on blood findings in twenty species of wild mammals. J.S. Afr. Vet. Med. Ass. 37: 95-98.
- includes eland, impala, springbuck, reedbuck, mountain reedbuck, grey reedbuck, blue wildebeest, grey duiker, black-fronted duiker, Burchell's zebra, Hartman's zebra, spotted hyaena, baboon, vervet monkey, Samango monkey.
1033. Young, E. 1966. Use of anaesthetics in the transport of animals. Int. Zoo Yearbook 6: 273.
1034. Young, E. 1966. The use of tranquillizers, muscle relaxants and anaesthetics as an aid in the management of wild carnivores - twenty five case reports. J.S. Afr. Vet. Med. Ass. 37: 293-296.

1035. Young, E. 1966. Treatment of cutaneous granulomata in the black rhinoceros. *Int. Zoo Yb.* 6: 276.
1036. Young, E. 1967. Leg paralysis in the greater flamingo and lesser flamingo Phoeniconterus ruber roseus and Phoenicenaia minor following capture and transportation. *Internat. Zoo Yearbook* 7: 226.
1037. Young, E. 1967. Physiological values of the African elephant Loxodonta africana. *The Veterinarian* 4: 169-172.
1038. Young, E. 1967. The hand-rearing of the young of the cat tribes. *Afr. Wild Life*. 21: 21-27.
1039. Young, E. 1968. Care of young wild ungulates. *Afr. Wild Life* 22: 126-140.
1040. Young, E. 1968. Management of adult wild African ungulates. *Afr. Wild Life* 22: 15 pp.
1041. Young, E. 1969. The significance of infectious diseases in African game populations. *Zool. Africana* 4: 275-281.
1042. Young, E. 1970. The diagnosis and control of game diseases. *Zool. Afr.* 5: 167-177.
1043. Young, E. 1971. A useful marking method for free living mammals. *Koedoe* 14: 131-136.
1044. Young, E. 1972. Cheetahs. *Custos* 2 (1): 10-12.
- mentions rickets, mange and "cat flu".
1045. Young, E. 1972. Considerations on large scale vaccination of free-living game. *J.S. Afr. Vet. Ass.* 43: 189-191.
1046. Young, E. 1972. Notes on the chemical immobilization and restraint of the Addo elephant (Loxodonta africana). *Koedoe* 15: 97-99.
1047. Young, E. 1972. Overstraining disease (capture myopathy) in the tsessebe, Damaliscus lunatus, and oribi, Ourebia ourebi. *Koedoe* 15: 143-144.
1048. Young, E. (Editor). 1973. The capture and care of wild animals. Human Rousseau, Cape Town and Pretoria.
1049. Young, E. 1975. Echinococcosis (hydatidosis) in wild animals of the Kruger National Park. *J.S. Afr. Vet. Ass.* 46: 285-286.
1050. Young, E. 1975. Some important parasitic and other diseases of lion Panthera leo, in the Kruger National Park. *J.S. Afr. Vet. Ass.* 46: 181-183.
- trichinosis, filariasis, mange, pentastomiasis, echinococcosis, taeniasis, hepatozoonosis, anthrax, babesiosis, and rickets.
1051. Young, E. 1975. Trichinosis (Trichinella spiralis infestation) in wild animals in the Kruger National Park. *J.S. Afr. Vet. Med. Ass.* 46: 233-234.
1052. Young, E. and P.A. Basson. 1973. Heartwater in eland. *J.S. Afr. Vet. Ass.* 44: 185-186.
1053. Young, E. and P.A. Basson. 1976. Cordophilosis (Cordophilus sagittus v. Linstow 1907) and fatal gastro-intestinal verminosis in eland Taurotragus oryx. *J.S. Afr. Vet. Med. Ass.* 47: 57.
1054. Young, E., P.A. Basson and K.E. Weiss. 1970. Experimental infection of game animals with lumpy skin disease virus (prototype strain neethling). *Onderstepoort J. Vet. Res.* 37: 79-88.
- poxvirus. Species inoculated: giraffe, impala, buffalo and black wildebeest. The giraffe and impala died with signs typical of the disease in cattle. Infection did not occur in the buffalo and wildebeest.

1055. Young, E., and P.J.L. Bronkhorst. 1971. Overstraining disease in game. *Afr. Wildlife* 25: 51-52.
1056. Young, E., R.S. Hedger and P.G. Howell. 1972. Clinical foot and mouth disease in the African buffalo (*Syncerus caffer*). *Onderstepoort J. Vet. Res.* 39: 181-189.
1057. Young, E. and S.P. Kruger. 1966. Fatal infestation of the bald ibis, *Geronticus calvus*, with *Tropisurus americanus*. *J.S. Afr. Vet. Med. Ass.* 37: 240.
- proventricular nematode.
1058. Young, E. and S.P. Kruger. 1967. *Trichinella spiralis* (OWEN, 1835) RAILLIET, 1895, infestation of wild carnivores and rodents in South Africa. *J.S. Afr. Vet. Med. Ass.* 38: 441.
1059. Young, E. and C.J. Lombard. 1967. Physiological values of the African elephant. *The Veterinarian*. 4: 169-172.
1060. Young, E. and J. Oelofse. 1969. Management and nutrition of 20 newly captured young African elephants. *Int. Zoo Yearbook* 9: 197-184.
1061. Young, E. and L.W. Van den Heever. 1969. The African buffalo as a source of food and by-products. *J.S. Afr. Vet. Med. Ass.* 40: 83.
1062. Young, E. and L.J.J. Wagener. 1968. The impala as a Source of food and by-products. Data on production potential, parasites and pathology of free-living impalas of the Kruger National Park. *J.S. Afr. Vet. Med. Ass.* 39: 81.
1063. Young, E., L.J.J. Wagener and P.J.L. Bronkhorst. 1969. The blue wildebeest as a source of food and by-products. *J.S. Afr. Vet. Med. Ass.* 40: 315-318.
1064. Young, E. and I.J. Whyte. 1973. The use of xylazine hydrochloride in the capture, management and treatment of some African wildlife species. *J.S. Afr. Vet. Med. Ass.* 44: 177-184.
1065. Young, E., F. Zumpt and J.F. Whyte. 1972. Sarcoptic mange in free-living lions. *J.S. Afr. Vet. Med. Ass.* 43: 226.
1066. Young, E., F. Zumpt and J.F. Whyte. 1972. *Notoedres cati* (Herring 1838) infestation of the cheetah: preliminary report. *J.S. Afr. Vet. Med. Ass.* 43: 205.
1067. Young, E. et al. 1973. Parasites and diseases of Cape mountain zebra, black wildebeest, mountain reedbuck and blesbuck in the Mountain Zebra National Park. *Koedoe* 16: 77-81.
1068. Zumpt, I.F. 1976. The yellow mongoose (*Cynictus penicillata*) as a latent focus of rabies in S. Africa. *J.S. Afr. Vet. Ass.* 47: 211-213.

Subject Index

Aardvark

- ketamine in, 67
- milk substitute, 1027
- pseudotuberculosis, 787
- trypanosomes, 975

Aardwolf

- Trichinella in, 908

Abscess

- in elephant, darted, 1060

Actinomycosis

- in ruminants, 1041

Addax

- tuberculosis, 933

Adrenal

- pathology, baboon, 743

African horse sickness

- antibody in elephants, zebras, 195, 1041
- antibody in wild animals, 210, 463, 858, 827

African swine fever

- in wild swine, 390, 391, 440, 585, 588, 659,
661, 717, 735

Age determination, of

- Bovidae, tooth section, 25
- mammals, teeth examination, 905

Aloureststrongylus,

- in cheetah, 997

Anaesthetic, for

- birds, 173, 175, 345, 450, 557
- cats, 451
- giraffe, 750
- lion, 127

- reptiles, 450
- transport, 1033
- wild carnivores, 1034
- wild mammals, 318, 856

Anaplasma, in

- antelope, 564, 665
- blesbuck, 654, 661
- buffalo, 833
- eland, 661
- giraffe, 36
- wild animals, 210, 463
- wildebeest, 118, 651

Anatomy

- external characteristics, ruminants, 737
- field research methods, 402
- hair, Bovidae, 241
- placenta, mammals, 206
- skin glands, ruminants, 736
- stomachs, ruminants, 403
- topographic, ruminants, 404

Ancylostoma sp.

- in genet, 661
- in honey badger, 661

Anoplocephala spp.

- in white rhinoceros, 661

Antelope

- Age criterion, horn growth, 875
- Anaplasma in, 564, 665
- Anthrax in, 661
- Avitellina sp. in, 661
- Benceitia in, 610
- Brucella in, 813
- Cooperia, 661
- cysticercosis, 799
- Cytauxzoon, 660
- fascioliasis, 86
- Galigeria sp., 661
- Gastrophilus in, 500
- Haemonchus, 661
- helminths, 785
- lungworms, 312, 313, 682
- Monoxia spp. in, 661
- mother - young relationship, 554
- muscular dystrophy, 442
- nematodes, 625, 627
- Oesophagostomum in, 661
- Ostertagia in, 661
- reovirus antibody, 639
- Sarcocystis, 584
- schistosomiasis, 719
- Setaria, 661
- Stilesia, 417
- Taenia cysts, 661
- Trypanosoma sp. in, 661
- trypanosomiasis, 243
- xylazine fer, 888

Antelope, Hunter's

- muscular dystrophy, 441

Antelope, roan

- anthrax, 707

- babesiosis, 1002
- breeding in captivity, 233
- chlamydiosis, 1002
- cytauxzoon, 1002
- Dermatophilus in, 215
- drug immobilization, 406, 407
- ecology, behaviour, 153
- haemorrhagic disease, 331
- Pneumocystis carinii, 1002

Antelope, sable

- babesiosis, 539, 1002
- foot-and-mouth disease, 373

Anthrax

- in blebuck, 652, 661
- in buffalo, 601
- in captive carnivores, 433
- in elephant, 661, 860
- in hippopotamus, 661
- in lion, 1050
- in ostrich, 661
- in roan antelope, 707
- in wild animals, 154, 251, 585, 661, 1040
- in vultures, 418, 661
- in zebra, 661
- vaccination, 661, 763

Ape

- chickenpox in, 999
- tuberculosis, 822

Arboviruses

- from wild mammals, 489
- serology in wild animals, 270, 677

Arteriosclerosis

- in elephant, 62, 218, 221

Artiodactyla

- piroplasms of, 498
- Theileria in, 393

Ascaris spp.

- in zebra, 661

Acerorhynchus

- in fish eagle, 456

Athysanella

- in jackals, 350, 667

Avitellina spp.

- in blebok, 416

B. virus

- in monkeys, 24, 368, 470

Babesia

- failure to infect blesbok, 746
- in black rhinoceros, 83, 111, 211
- in buffalo, 833
- in bushbuck, 84
- in bushpig, 855
- in elephant, 108, 111, 211, 688
- in gnu, squirrel, 380
- in hyrax, 249
- in jackal, hyaena, leopard, lion, elephant, rhinoceros, zebra, giraffe, 111, 211
- in leopard, 109, 111, 211, 212
- in lion, 106, 198, 1050
- in ream, 1002
- in sable, 595, 1002
- in wild mammals, 270, 421
- in white rhinoceros, 83
- transmission to gazelle, 257

Babeen

- adrenal pathology, 743
- anthrax, 661
- Brucella serology, 973
- care and raising newborn, 969
- carnivorous behaviour, 189, 192
- collection of biomedical material, 460
- diseases, 600
- ecology, 8
- haematology, serum chemistry, 287, 1032
- intestinal parasites, 526
- intestinal protozoa, 646
- ketamine in, 67
- leptospirosis, 276
- listeriosis, 260
- pathology, 504, 914
- parasites, 527, 528, 644, 645, 914
- pex, 370
- pseudotuberculosis, 998
- reproductive behaviour, 790
- Rift Valley fever experimental, 199
- schistosomes, 621, 622, 277, 720
- shigellosis, 718
- Taenia solium, in 968
- trapping, subsequent behaviour, 75
- tuberculosis, 392, 933, 934, 970
- viral infections, 259, 583, 774

Badger honey

- Ancylostoma, 661

Behaviour

- of birds with ungulates, 35, 74

Besnoitia, in

- impala, 85
- warthog, 483
- wild animals, 58, 463, 610
- wildebeest, 63, 85

Bilharziasis, in (see also schistosomes)

- hippopotamus, pathology, 614
- wild animals, 672

Biltong

- identification, 203

Birds

- association with mammals, 35, 74, 937
- ketamine in, 67, 450
- sedation, anaesthesia, 450
- smallpox serology, 100

Blesbok (Blesbuck)

- Anaplasma centrale in, 661
- Anaplasma ovis in, 654, 661
- anthrax in, 652, 661
- bluetongue in, 649, 746
- Eperythrozoon ovis, in 654
- exposure to Babesia, Theileria, 746
- haematology, 843
- heartwater in, 649, 650, 653, 746
- helminths, 416
- malignant edema, 576
- Oestrus ovis in, 661
- parasites, 1067
- physiology of forced exercise, 365
- serum chemistry, 843
- splenectomy, 746

Blood parasites

- of artiodactyles, 113
- of birds, 31, 70, 71, 72, 144, 145, 388, 691, 693, 694, 935, 1007
- of carnivores, 499
- of wild mammals, 294, 476, 492, 494, 647, 648

Bluetongue in,

- blesbeek, 649, 746
- buffalo, 1041
- kudu, 365
- mountain gazelle, 50, 51
- Senegal hartebeest, 894
- shrew, 442
- wild mammals, 198, 270, 329, 339, 400, 463, 550, 585, 661, 827

Bones

- skull malformation, lion, 41
- nutritional disease, primates, 242

Bongo

- drug immobilization, 343
- in captivity, 686

Brucella

- in impala, 435
- in penguin, 661
- in rodents, 661

Betulism

- in waterfowl, 661
- G. betulinus in lake mud, 596
- ostrich, 661

Bovine petechial fever

- in wild animals, 270, 463, 894

Bovine viral diarrhoea

- antibody in wild animals, 270

Brain

- cerebellar herniation, lion, 41

Brucella, in

- antelopea, 813
- baboon, 877
- buffalo, 165, 315, 459, 973
- eland, 939, 973
- giraffe, 973
- hartebeest, 973
- impala, 826
- rodents, 387
- waterbuck, 164, 332
- wild animals, 58, 167, 216, 270, 599, 616, 758, 777, 783, 814
- wildebeest, 973

Buffalo, African

- age determination, 328, 710
- anaesthesia, 318
- Anaplasma in, 833
- anthrax, 545
- Babesia in, 833
- blood types, 685
- bluetongue, 1041
- body temperature, 355
- bovine herpesvirus 1, antibody, 302, 717
- brucellosis, 165, 315, 459, 973
- carcinoma, 61
- chromosomes, 950, 1017
- contagious bovine pleuropneumonia, experimental, 852
- Cordophilus, pathology, 613
- cysticercosis, 61
- diseases, parasites, review, 623
- drug immobilization, 238
- ephemeral fever, antibody, 196
- fascioliasis, 86
- filariasis, 61
- foot-and-mouth disease, 162, 218, 263, 264, 371, 373, 378, 1056
- growth, 710
- haematology, 239
- herpesvirus, allerton, 824
- herpesvirus, bovid 1, 376, 461
- home range and food, 556, 710
- hydatidosis, 61
- leptospirosis, 949
- mange, 61, 262, 1041
- mycotic lymphadenitis, 61
- nitrogen utilization, 183
- para influenza virus 3, 348
- pentastomiasis, 61
- Rift Valley fever susceptibility, 191
- rinderpest, 14, 98, 581, 725
- sarcosporidiosis, 29
- schistosomiasis, 61, 720
- serum chemistry, 239
- Sevaria, 854
- slaughter for food, 1061

- theileriosis, 61, 103, 104, 106, 107, 118, 314, 560, 82, 833, 1023
- trypanosomes, 1024
- tuberculosis, 337, 940, 1010
- Wesselsbron disease, 1041

Bunostomum

- in reedbuck, 661

Bushbuck

- actinomycosis, 929
- age determination, horn growth, 876
- Babesia, 84
- bovine petechial fever, 270, 463, 894
- Cordophilus, pathology, 557
- foot-and-mouth disease, 373
- haemorrhagic disease, 331
- schistosomes, 720
- serum proteins in trypanosomiasis, 573
- Theileria parva, failure to infect, 560
- trypanosomes in, 386

Bushpig,

- African swine fever in, 440
- babesiosis, experimental, 855
- rinderpest, 581
- schistosomes, 720
- Trichinella, 429, 670, 908

Candida, in

- hedgehog, feet pads, 256
- hyrax, gastritis, 738
- primates, 1000

Capillaria hepatica

- in wild animals, 661

Capillarensis

- intestinal, in peacock, 630

Capture (see also drug immobilization)

- of wild animals, 1048

Caracal

- anthrax in, 433

Care

- of captive wild animals, 1048

Carnivores

- anthrax, 661
- blood protozoa, 499

Cats,

- ketamine in, 395
- pex, 589, 591

Cestodes

- in genet, hyaena, 619
- in wild mammals, 426, 1014

Cheetah

- Aleurostrongylus in, 997
- breeding in captivity, 587
- diseases, 1044
- ketamine in, 67
- Notedrog in, 1066
- Spilocerca in, 641
- Telazol (CI 744) in, 92

Chickenpox

- in apes, 999

Chimpanzee

- anaesthesia, 318
- focal epithelial hyperplasia, 926
- hepatitis, virus carrier, 952
- phencyclidine effects, 524
- Pneumocystis in, 738
- pseudotuberculosis, 998
- Trichurosis, 630

Chlamydia

- in roan and sable, 1002

Civet

- distemper, 117
- ketamine in, 67
- Paragonimus in, 971
- rabies, 469

Clostridium

- botulism, lake mud, 596
- malignant oedema antelopes, 291

Coccidia, in

- antelopes, 82
- Bovidae, Cervidae, Camelidae, 742
- impala, 58, 81, 706

Competition

- wildlife vs. livestock, 116, 139, 210, 265

Contagious bovine pleuropneumonia

- antibody in wildebeest, hippopotamus, 851
- experimental, buffalo, 852
- not found in wildlife, 544
- serology in wild animals, 270

Contagious ecthyma

- in steenbok, 1041

Cooperia spp.

- in antelopes, 661

Cooperoides hepatica, in

- antelopes, 471, 809, 1014
- impala, 636

Copper

- in liver, 419

Cordophilus, in

- kudu, bushbuck and buffalo, 613
- nyala, 482

Cormorants

- subcutaneous mites, 835

Corynebacterium pseudotuberculosis

- in Thomson's gazelle, 1041

Crane

- anaesthetic for, 345
- Haemoproteus, 691

Crocodile

- breeding in captivity, 128, 716
- drug immobilization, 913

Cysticercosis

- attempts to infect with C. bovis in Thomson's gazelle, 274
- in buffalo, 61
- in vervet monkey, 529
- in wildebeest, 143, 946
- in wild herbivores, 226, 227, 310, 797, 799, 803, 1013, 1014.

Cytauxzoon

- in duiker, 668
- in eland, 101, 102, 593
- in giraffe, 555
- in roan and sable, 1002
- in wild animals, 58, 657, 660

Cytomegalic inclusion disease

- in hedgehog, 462

Delafondiasis

- in zebra, 612

Dermatophilus

- in roan and sable, 215
- in zebra, giraffe, Thomson's gazelle, 37

Diabetes melitus

- in oryx, 956

Dictyocaulus arnfieldi

- in zebra, 661

Dictyocaulus viviparus

- in wildebeest, 1063
- in eland, 661

Dik dik

- breeding in captivity, 231
- physiology, 414

Dipetelonema

- in elephant, hepatitis, 62

Diseases

- wildlife, 201, 270, 275, 464, 468, 615, 695, 766, 784, 981, 1041

Distemper

- in jackal, hunting dog, bat-eared fox, hyaena, civet, genet, 117, 405

Dog, hunting

- behaviour, 289
- ehrlichiosis, 661, 664, 929
- distemper in, 117, 405
- Toxarcaris in, 661

Domestication

- disease
- of eland, 741, 946, 946, 954
- of wild ruminants, 512, 531, 760

Drug immobilization

- effects on body temperature, 209, 240
- effects on clinical, haematological parameters, 240
- equipment, 448, 859, 861, 863, 963
- mechanical problems, 342
- of birds, 67, 171, 173, 450, 451
- of elephant, 1046
- of large carnivores, 712
- of Felidae, 121, 772
- of giraffe, 750

Duck

- rhinosporidiosis, nasal, 261

Duiker

- age determination, 767, 768
- blood protozoa, 497
- breeding season, 767
- Cytauxzoon in, 668

- drug immobilization, 1005
- effects of hunting, 152
- haematology, 1032
- hoof growth, excessive, 977
- schistosomes, 720
- splenectomy, 746
- Stilesia in, 471
- Trypanosomes, immunity, 214
- tuberculosis, 594, 661

Echidna

- milk substitute, 1027

Echinococcus

- in buffalo, 61
- in lion, 1050
- in patas monkey, 286
- in wild animals, 1049
- in wild herbivores, 226, 661, 967, 1013, 1014
- role of marabou stork in transmission, 986

Ecology

- effects of control of trypanosomiasis, 681
- of baboons, 8

Ectoparasites

- of East African vertebrates, 692
- treatment, 925

Egret

- foot of cattle egret, 865

Ehrlichia canis

- in hunting dogs, jackals, 661, 664, 929

Eland

- age determination, 491
- anaesthesia, 318
- Anaplasma in, 661
- body temperature, 209, 240, 355
- bovine herpesvirus 1, antibody, 302
- brucellosis, 939, 973
- cordophilosis, 1053
- Cytauxzoon, 101, 102
- Dermatobia, 696
- domestication, 741, 946, 947, 954
- drug immobilization, 1, 240, 270, 487
- Eperythrozoon, 661
- growth, 946
- haematology, 239, 240, 1032
- heartwater in, 336, 1052
- leptospires, 949
- meat, parasites, pathology, 478
- milk, 946
- nematodes, 1053
- nutrition, 279, 946
- organ weights, 946
- reproduction, 883, 946
- rinderpest, 581, 773
- schistosomes, 720
- serum chemistry, 239, 240

- Stilesia in, 471, 809
- Theileria, 335, 436, 560, 955, 1025
- trapping, 409
- tuberculosis, 933

Elephant, African

- abscess, 542, 1060
- African horse sickness, 195
- age determination, 443, 539, 542, 700, 785, 790
- anaesthesia, 318
- anthrax, 661, 860
- arteriosclerosis, 62, 218, 221, 866, 868, 870
- artificial insemination, 673
- Babesia in, 108, 111, 688
- behaviour, 123, 126, 542, 1009
- body temperature, 127, 209
- control, 714
- corpora lutea, 5
- cropping for meat, 218, 688
- dentition, 443, 535, 629
- Dipetelonema, hepatitis, 62
- domestication, 705
- drug immobilization, 1046
- encephalomyocarditis virus in, 878
- etorphine in, 253, 716
- food, feeding, 66, 123, 235, 753
- foot care, 980
- foot diseases, 791
- Grammocephalus, cholangitis, 62
- granuloma, 675
- haematology, 202, 831, 1037
- haemoglobin characterization, 516
- helminth parasites, 959
- herpesvirus, 58, 62, 606, 609
- leptospirosis, 949
- life span, 849
- lungs, 858, 860
- marking, 713
- nematodes, treatment, 1060
- oestrus, 983
- Parabronema, gastric ulcer, 62
- physiology, 69, 1059
- placenta, foetal membranes, 11
- rearing captive young, 68, 1060
- reproduction, 124-126, 542, 698, 699, 700, 701, 850
- respiration, blood, 48
- Rift Valley fever antibody, 988
- Salmonella in, 1006
- semen collection, 453
- skin, histology, 899
- size, growth, 443, 542, 698, 700
- spinal cord, histology, 966
- testis, 444, 445
- throat bots, 779
- Toxoplasma antibody, 762
- tsetse, hots, 284
- tuberculosis, 308
- urinary cystitis, 62
- urine, 679
- vaginal prolapse, 624
- vaginitis, 62

Encephalomyocarditis virus

- in elephants, 878

Entamoeba histolytica

- in gorilla, 1041

Eperythrozoon

- transmitted to blesbuck, eland, 645, 661

Ephemeral fever

- antibody in buffalo, waterbuck, 196

Erysipelothrix

- in diana monkey, 978

Etorphine

- effects in mammals, 5, 357, 447, 715, 848, 979, 1016
- in duiker, 1005
- in elephant, 253, 716
- in gemsbuck, 250, 252
- in giraffe, 122
- in hartebeest, 519
- in rhinoceros, 480, 488
- in waterbuck, 354

Fasciola, in

- buffalo, antelopes, 86
- wild animals, 349

Felidae

- anaesthetic, 451
- etorphine in, 772
- nutrition of, 841
- reproduction, 816

Fence, for

- game, disease control, 440, 661
- game electric, 16
- wild ungulates, 559, 765

Fentanyl, for

- gemsbuck, 252
- rhinoceros, 344, 480
- wild animal capture, 1020

Filaria, in

- buffalo, 61
- heart, Tragelaphus spp., 948
- lion, 1050
- rhinoceros (see also Stephanofilaria), 896
- wild animals, 163
- wild birds, 144, 255

Flamingo

- and lake pollution, 558
- arteritis, 518
- biology, 964
- inflammation of kidney, ureter, 518
- mite, feather, 703
- myopathy, 1036
- plumage and moult, 873
- tuberculosis, 177, 270, 518

Flies

- biting, on rhinoceros, 689

Foot-and-mouth disease

- in antelope, sable, 373
- control, game fence, 440, 661
- experimental, impala, wildebeest, 12
- importation, zoo animals, 239
- in brown rate, 135
- in buffalo, 162, 218, 263, 264, 371-346, 1056
- in bushbuck, 373
- in elephant, 423, 424
- in impala, 373, 617, 1041
- in kudu, 373
- in lechwe, 218
- in nutria, 134
- in warthog, 373
- in waterbuck, 373
- in wild animals, 52, 115, 160, 263, 264, 270, 282, 352, 372, 373, 377, 378, 463, 532, 577, 578, 585, 598, 661, 778, 827
-

Fox, bat-eared

- distemper in, 117, 495
- rabies in, 201, 795

fox, fennec

- Pneumocystis in, 738
- Telazol (Cl 744) in, 92

Gaigeria sp.

- in antelopes, 661

Galago

- Pneumocystis in, 738
- pseudotuberculosis, 998

Game animals

- as carriers of disease, 246

Gazelle

- muscular dystrophy, 442
- parasites, 702
- sarcosporidiosis, 635

Gazella soemmeringi

- experimental Babesia bigemina infection, 257

Gazelle, Grant's

- actinomycosis, 929
- bovine herpesvirus 1, antibody, 302
- haematology, 239, 844
- nutrition, 280
- reproduction, 280
- Rift Valley fever, antibody, 193
- sarcosporidiosis, 429
- serum chemistry, 239, 844

Gazelle, Thomson's

- actinomycosis, 1041
- age determination, 771
- attempts to infect with Cysticercus bovis, 274
- bovine herpesvirus 1, antibody, 302
- Dermatophilus in, 37
- Gazellostrongylus in, 131
- gestation, 555
- haematology, 239
- helminths, 1018
- ketamine in, 66
- leptospires, 949
- lungworms, 225
- nutrition, 279, 280
- reproduction, 280, 430, 432, 436
- Rift Valley fever, antibody, 193
- serum chemistry, 239

Gazellostrongylus lerouxi

- in antelopes, 500
- in Thomson's gazelle, 131

Geddoelstia

- in wildebeest, hartebeest, 53-58
- in man, 88

Genet

- Ancylostoma sp., 661
- anthrax, 433
- cestodes, 619
- distemper, 117
- pentastomes, 941
- piroplasms, 380
- rabies, 661
- ticks, 144

Gerbil

- Capillaria, 661
- listeriosis, 260
- plaque, 200

Gerenuk

- aorta histology, 871
- food habits, 552

Gestation periods

- of wild animals, 674

Giant forest hog

- African swine fever in, 389

Giraffe

- anaesthesia, 318
- Anaplasma, 36
- anatomy, physiology, behaviour, housing, feeding, reproduction, 690
- Babesia, 111
- body temperature, 355
- breeding, hand rearing, 821

- Brucella serology, 973
- castration, 1021
- Cytauxzoon, 611
- dentition, age determination, 347
- Dermatophilus, 37
- disease, 690
- leptospires, 949
- lumpy skin disease, experimental, 1054
- mange, 1041
- neck, role in locomotion, 187, 188
- parasites, 702
- respiratory dead space, 770
- rinderpest, 581
- schistosomes, 720
- skin papilloma, 465
- types, 913
- Trichuris, 576
- trypanosomes, 463
- tuberculosis, 576, 594, 661

Goose

- rhinosporidiosis, nasal, 261

Gorilla

- Entamoeba histolytica and Strongyloides, 1041

Grammocephalus

- in elephant, with cholangitis, 62

Gryshuck

- schistosomes, 720

Habronema spp.

- in zebra, 661

Haematology

- comparative mammalian, 368
- of birds, 169, 174,
- of wild animals, 155, 166, 218, 239, 270

Haematoxenus

- in impala, 435

Haemonchus

- in blesbock, 416
- in Thomson's gazelle, 463
- in wild ruminants, 661

Haemoproteus, in

- crowned crane, 691
- marabou stork, 693

Hair

- morphology, in Bovidae, 203, 203, 241

Hare

- Capillaria, 661
- Taenia serialis in, 661
- pox, 467

Hartebeest

- bluetongue - like disease, 994
- body temperature, 209
- Brucella serology, 973
- etorphine in, 519
- food habits, 138, 415
- Geddoelstia, 53-58,
- haematology, 239, 1028
- lungworms, 225
- malignant catarrhal fever virus in, 756, 757
- mange, 661
- muscle necrosis, 1028
- parasites, 702
- Rift Valley fever antibody, 193
- rumen fermentation, 415
- schistosomes, 720
-

Heartwater

- attempted infection, wild ruminants, 316
- diagnosis, brain biopsy, 920
- in blesbuck, 649, 650, 653
- in eland, 336, 1052
- in springbuck, 655, 661
- in wild animals, 585

Hedgehog

- biology, 324
- Candida, in foot pads, 256
- Capillaria, 661
- cytomegalic inclusion disease, 462
- diseases, 885
- mycotic infections, 159, 256
- tumor-like disease, 326

Helminths

- check list, Tanzania, 130
- faecal egg output, 942
- in African mammals, 789
- in antelopes, Rhodesia, 785
- in ruminants, Botswana, 136
- in wild animals, Chad, 309
- in wild animals, Ethiopia, 311
- in wild animals, Kenya, 270
- in wild animals, South Africa, 585

Hepatozoon, in

- impala, 60
- lion, 1049
- wild animals, 58, 112, 474, 493, 522
- wild carnivores, 607

Herpes, elephant

- lung lesions, 58, 60, 606, 609

Herpesvirus, allerton

- in game, 733
- in buffalo, 824

Herpesvirus, bovine 1 (HB1), in

- buffalo, 376, 461
- hippopotamus, 461
- wild animals, 270, 302, 376, 520, 747, 793, 794
- wildebeest, 376, 463, 466, 793

Meterakis

- associated with caecal granulomas, 330

Hippoboscid flies

- on wild herbivores, 1014

Hippopotamus

- African swine fever, no evidence of involvement, 912
- age determination, 540
- anthrax, 661
- aorta histology, 871
- bilharziasis, pathology of, 614
- blood parasites, 294
- dentition, 540
- contagious bovine pleuropneumonia antibody, 851
- drug immobilisation, 586
- eye lesions, 218
- feeding habits, 21
- herpesvirus bovid 1 antibody in, 461
- leptospirae in, 43
- measurements, weights, 22
- milk, 320
- nutrition, 1030
- pathogens in, 338
- placenta, foetal membranes, 9
- reproduction, 540
- Rift Valley antibody, 249
- schistosomes, 720
- skin anatomy, physiology, 572
- skin secretion, 943
- toxoplasma antibody, 762
- trypanosomes, 218, 220

Histoplasma

- in monkey, 290

Hyaena, spotted

- Babesia in, 111
- cestodes, 619
- distemper, 117
- haematology, 1032
- ketamine in, 67, 887
- rabies, 795
- reproduction, 597
- Spirecerca, 114
- Taenia, in, 671
- Trichinella in, 670, 815, 908

Hyaena, striped

- behaviour and food, 525
- Trichinella in, 670, 908

Hyrax

- anatomy, behaviour, evolution, distribution, 513
- Babesia, 439
- gastric candidiasis, 738
- gastric ulcers, nematodiasis, 329, 738
- Pneumocystis in, 738
- pseudotuberculosis, 738, 998
- Toxoplasma antibody in, 762

Ibis

- proventricular nematodiasis, 1057

Impala

- actinomycosis, 1041
- age determination, 147, 775
- anaesthesia, 318
- behaviour, 551
- Besnoitia, 85
- Borrelia, 435
- bovine petechial fever, experimental, 894
- brucellosis, 826
- capture, 407
- carcass values, 492, 548
- coccidia, 81, 706
- Cooperoides, 471, 636, 809, 1062
- drug immobilization, 2, 67, 240, 333
- foot-and-mouth disease, 12, 617, 1041
- gestation, 19
- growth, 147
- haematology, 239, 240, 1032
- Haematoxenus, 435
- hepatozoonosis, 60
- horn growth, 903
- ketamine in, 67
- lumpy skin disease, experimental, 1054
- lungworms, 13, 225, 379, 1062
- mange, 1041
- schistosomes, 720, 722
- serum chemistry, 239, 240, 684
- skin papilloma, 58, 465
- Stilesia, 471, 636, 809, 1061
- teeth, 148, 149, 903
- trypanosomes, 435
- uterine coccidiosis, 58, 608

Impalala spp.

- in blesbok, 416

Inermicapsifer sp.

- in rodents, 661

Infectious bovine rhinotracheitis

- see Herpesvirus, bovine 1

Jackal

- age determination, growth, 567
- Atheobia in, 350
- Babesia in, 111, 211, 661, 667
- control, use of "coyote getter", 569, 961, 962
- distemper, 117, 405
- ehrlichiosis, 661, 664
- mange, 475

- rabies, 795
- Sairocerca, 114
- Taenia, 661, 671
- Trichinella, 20, 908

Johne's disease - see Paratuberculosis

Kalicephalus

- in snakes, 168

Ketamine, for

- baboon, 892
- birds, 450, 451
- cats, 395, 892
- hyaena, 887
- impala, 892
- reptiles, 172, 450, 451
- wild animals, 67

Klipspringer

- aorta histology, 871

Klossiella

- in wild animals, 58

Kob

- Cysticercus bovis in, 310
- monesina in, 224
- schistosomes, 720

Kudu, greater and lesser

- age determination, 874, 876, 877
- anthrax, 661
- bluetongue, 399
- Cordiphilus, pathology, 613
- dentition, 874
- foot-and-mouth disease, 373
- growth, 874
- malignant catarrhal fever, 95
- parasites, 161
- rinderpest, 581
- schistosomes, 720
- tuberculosis, 594, 661, 933, 938

Lassa fever

- comparative pathology, 975
- in wild animals, 296

Lechwe

- foot-and-mouth disease, 218
- tuberculosis, 218, 292

Leishmania

- from squirrel, 381

Leopard

- anaesthesia, 451

- Babesia, 111, 212
- diaphragmatic hernia, 977
- immobilization with Telazol (cl 744), 79, 92
- ketamine in, 67
- nutrition, 1031, 1038
- panleukopenia, 446
- restraint, 412
- Trichinella, 670, 908
- trypanosomes, 39

Leptospire

- in baboon, 276
- in hippopotamus, 43
- in large mammals, 949
- in rodents, 43, 927
- in wildlife, 295, 523
- serology, wild mammals, 949

Lice

- on wild birds, 145
- on wild herbivores, 1014

Linguatula - see pentastomes

Lion

- age determination, 891
- anaesthesia, 318, 451
- anthrax, 1050
- Babesia, 111, 1050
- capture, anaesthesia, 133
- contraception, 847
- Echinococcus, 1050
- filariasis, 1050
- Hepatocon, 1050
- immobilization with Telazol (cl 744), 79, 92, 121
- ketamine in, 67
- leptospire, 949
- Listeria, 346
- mange, 1041, 1050, 1065
- nutrition, 1031, 1038
- pentastemiasis, 1050
- phenacyclidine in, 77, 893
- pseudotuberculosis, 998
- rectal prolapse, 1011.
- restraint, 412
- rickets, 1050
- skull malformation, cerebellar herniation, 41
- steatitis, 977
- Taenia, 228, 671, 1050
- Toxoplasma, 762
- Trichinella, 670, 908, 1050
- trypanosomiasis, 38, 39, 218, 219, 812
- weights, measurements, 78

Listeria

- in baboon, gerbil, 260
- in lion, 346

Lumpy skin disease

- in wild animals, 58, 1054

Lungworms, in

- antelopes, 312, 313, 633, 682

- hartebeest, 225
- impala, 13, 225
- Thomson's gazelle, 225
- topi, 225
- wildebeest, 225
- wild herbivores, 1014
- zebra, 234

M99 - see etorphine

Malaria

- avian, 329
- primate, 158

Malignant catarrhal fever, in

- deer, from wildebeest, 818
- hartebeest, 756, 757
- kudu, 95
- wildebeest, 463, 585, 620, 726-732, 757, 796
- wildlife, 270, 302

Malignant edema

- in blesbuck after use of projectile syringe, 576

Mammonogram

- in wild animals, 808

Mango, in

- buffalo, 58, 61, 262, 1041
- cheetah, 1044
- giraffe, 1041
- hartebeest, 661
- impala, 1041
- jackal, 475
- lion, 929, 1050, 1065
- wild animals, 58
- wildebeest, 946, 1041

Marburg virus

- in wild animals, 296

Marking

- elephant, 712
- resistance to rabies, 832

Mastomys

- Lassa virus pathology, 975
- resistance to rabies, 832

Measles

- in colobus monkeys, 396, 836

Meat

- identification, 222
- of African ruminants, 530, 531, 546, 547
- of eland, 478
- of impala, 548
- of topi, 548

Mice

- hosts of schistosomes, 650

Milk

- giraffe, 27, 322
- hippopotamus, 320
- rhinoceros, 26, 321, 323
- wild animals, 73

Mites (see also Mange)

- pulmonary, primates, 506, 507, 508
- subcutaneous, cormorant, 835
- ear, cheetah, 949
- feather, 145, 146, 703

Monkeys (see also Primates)

- anatrachosomiasis, 680
- B virus, 23, 368, 470
- cysticercosis, in vervet, 529
- effects of polychlorinated biphenyls, 6
- crysipelas, in diana, 978
- haematology, vervet, samango, 1032
- histoplasmosis, 290
- hydatidosis, in patas, 286
- ketamine in, 67
- Lassa virus, pathology, 898
- measles, in colobus, 396, 836
- mites, lung, 506
- papillomas, in colobus, 94
- pox, 571
- pseudo-tuberculosis, vervet, patas, Brazza, 998
- schistosomes, in vervet, 720
- toxoplasmosis, 678
- trichurosis, 630
- tuberculosis, 933
- vervet monkey disease, in human, 452
- viruses from vervet, 505, 583

Monezia spp.

- in antelopes, 224, 661

Mongoose

- nutrition, 1031
- plaque, 661
- rabies, 661, 895, 1068

Mycoses

- buffalo, lymphangitis, 61
- hedgehog, 159, 325, 326
- waterfowl, nasal rhinosporidiosis, 261

Myiasis

- crop, vultures, 176
- Dermatobia, eland, 697
- intraocular, man, Gedoclstia, 88
- in wild animals, 804, 1014
- oculo-vascular, 53-58, 420
- oestrid, game, 538
- throat bots, elephant, 779

Myopathy, in

- antelope, gazelles, 293, 442
- blesbok, 365
- flamingo, 1036
- hartebeest, 1028
- Hunter's antelope, 441
- oribi, 1047
- springbok, 301
- tsessebe, 363, 1047
- wild animals, 49, 58, 142, 361, 363, 365, 602, 638, 977, 1046
- zebra, 366

Naloxone

- narcotic antagonist, 890

Necrobacillosis, in

- gemsbok, 237
- wild animals, 58

Nematodes, in

- antelopes, 625-627
- nasal mucosa, monkey, 686
- wild animals, 270, 829, 884, 1014

Netoedros

- in cheetah, 1066

Nutria

- foot-and-mouth disease in, 134
- nematodiasis, cerebral, 186

Nutrition (see also Diets)

- cats, 841, 1038
- herbivore, 3
- effect on reproduction, 817
- primates, 242
- ungulates, 1039, 1040
- water requirements, bovids, 928

Nyala

- Cordophilus in coronary vein aneurysms, 482
- myopathy, 293
- parasites and pathology, 477
- trypanosomes in, 84

Oesophagostomum sp.

- in antelopes, 661

Oestrus spp.

- in blesbok, 661

Orang-outang

- Entamoeba and Strongyloides, 1041

Oribi

- capture myopathy, 1047
- schistosomes in, 720

Oryx

- body temperature, 209, 355
- diabetes mellitus, 956
- etherphine in, 250, 252
- feeding studies, 907
- fentanyl in, 907
- necrobacillosis, 237

Ostertagia spp.

- in antelopes, 661

Ostrich

- anaesthesia, 451
- anthrax, 661
- body temperature, 355
- botulism, 661
- breeding, 553
- curled toe paralysis, 977

Oxyuris spp.

- in zebra and rhinoceros, 661

Pangolin

- anatomy, behaviour, evolution, distribution, 513

Panleukopenia

- in leopard, 446
- in wild cats, 405

Papilloma, cutaneous

- colobus monkey, 94
- impala, 58, 465
- giraffe, 465
- wildebeest, 1063

Papovavirus

- cause of oral lesion, chimpanzee, 926

Parabronema

- in elephant with gastric ulcers, 62

Paragonimus

- in civet, 875

Parainfluenza 3 virus

- serology, wildlife, 348

Parasites

- in game and domestic stock, 44, 694
- in game, 702, 807, 811, 951

Paratuberculosis

- serology, wild animals, 270

Pathology

- in birds of prey, 170
- of a tumor - like disease of hedgehogs, 326
- of diseases of wild animals, 640
- of Heterakis granulomas in birds, 330
- of Spirocerca in jackals, 114

Peacock

- intestinal capillarosis, 630

Pelican

- haematology, 155
- hepatitis, 518

Penguin

- Borrelia sp., 661

Pentastomes, in

- buffalo, 61
- genet, 941
- lion, 1050
- wild animals, 341, 501, 810, 1014
- wildebeest, 1063

Phencyclidine, in

- chimpanzee, 524
- impala, 2
- lion, 77

Physiology

- of dik dik, 414
- of wild animals, 830
- problems in capture of wild animals, 361, 363, 3

Piroplasms (see also Babesia)

- of artiodactyles, 498

Placenta, of

- elephant, 11
- hippopotamus, 9
- ungulates, 513

Plaque

- in rodents, mongoose, 200, 661

Pneumocystis

- in zoo animals, 738
- in roan, sable, 1002

Pneumonia

- verminous, 633

Polychlorinated biphenyls

- pathology in monkeys, 6

Population studies

- aerial census, wildlife, 230
- bushbuck, 7
- large mammals, 704

Post mortem

- procedures, 1012

Pox

- baboon, 370
- cats, 589-591
- hare, 467
- lumpy skin disease, 58
- monkey, 303, 571
- rodent, 592
- sheep-pox, serology in wild animals, 194
- smallpox, serology, 100

Primates

- anatomy, behaviour, evolution, distribution, 513
- Cabidida infection in, 1000
- cubed diets, 857
- Entamoeba histolytica, 1041
- malaria, 158
- nutritional bone disease, 242
- oral vaccine for rabies, 543
- smallpox, serology, 100
- Strongyloides spp. 1041
- ulcerative colitis in apes, 837

Protostrongylus spp.

- P. africanus, 633
- P. etoshai, 633
- P. gazellae, 633
- in wildebeest, 1063

Pseudotuberculosis, in

- aardvark, 787
- galago, hyrax, 738
- wild animals, 582, 998

Q fever

- in wildlife, 295
- serology, wildlife, 428

Rabies

- control, Africa, 776
- ecology, 140, 434
- in bat-eared fox, 201, 795
- in civet, 469
- in hyaena, 795
- in jackal, 795
- in Kenya, 427
- in mongoose, 661, 895, 1068
- in Praomys, natural resistance, 832, 634
- in primates, oral vaccination, 543

Ranching, of

- eland, 478, 490, 491, 562, 697, 780, 786

- game, 76, 190, 207, 531, 631, 696, 739, 764, 819, 879-883
- nyala, 477

Rats

- foot-and-mouth disease in, 135
- hosts of schistosomes, 720
- plaque, 661
- Praomys, resistant to rabies, 603
- Rift Valley fever virus in, 987
- trypanosomes in, 957

Reedbuck

- Bunostomum, 661
- haematology, 239, 1032
- parasites, 1067
- serum chemistry, 239
- schistosomes in, 720
- trypanosomes in, 180, 214

Reovirus

- antibody in wildlife, 639

Reproduction

- effects of nutrition, 817
- fertility problems in captivity, 534

Reptiles

- Kalicephalus in snakes, 168
- ketamine in, 67, 174, 450
- sedation and anaesthesia of, 450

Restraint

- of wild animals, 91

Rhebuck

- haematology, 1032

Rhinoceros, black

- age determination, 307
- Babesia in, 105, 111
- biting flies on, 689
- body temperature, 209
- breeding in captivity, 232
- drug immobilization, 208, 218, 344, 398, 407, 408, 481, 488, 510, 511
- granuloma, 1035
- milk composition, 26, 321, 323
- mortality in capture and trade, 604
- mycobacteriosis, 484
- Oxyuris sp. in, 661
- Salmonella, 1006
- serum proteins, 683
- skin lesions, 340, 397, 451, 788, 834, 896, 945, 1035
- Stephanofilaria in skin, 788

Rhinoceros, white

- Anaplocephala sp. in, 661
- Babesia in, 83

- etorphine for, 480
- fentanyl for, 480
- haematology, 846
- serum chemistry, 846
- Theileria-like piroplasm in, 83
- translocation of, 724
- xylazine for, 479

- Rickets, in
- in rodents, 661
 - lion, 1049

Rickettsia

- in rodents, 661
- in wild animals, Kenya, 382, 385

Rift Valley fever

- antibody in elephant, 988
- antibody in hippopotamus, 249
- in buffalo, 191
- in rats, 249, 383, 384, 888
- in rodents, 916
- in wild animals, 193, 270, 295, 296, 383, 827, 988
- pathogenicity in baboon, 199

Rinderpest

- control by game slaughter, 965
- in buffalo, 98, 581, 725
- in bushpig, 581
- in eland, 581, 773
- in giraffe, 581
- in impala, 839
- in kudu, 581
- in wildebeest, 930
- in wild animals, 14, 15, 17, 34, 99, 270, 463, 561, 579, 661, 725, 726, 734, 827, 838, 840, 900, 910, 930, 936, 1001, 1041
- risks of importation with zoo animals, 329

Ringworm

- in wildebeest, 485

Rodent

- arenaviruses in, 24
- Borrelia in, 661
- control of, 319
- Inermicapsifer sp. in, 661
- leptospires in, 43
- plaque, 661
- pox, 592
- Rickettsia, 661
- Rift valley fever, 383, 384
- smallpox serology, 100
- trichinosis, 1041

Rupen

- anatomy, 403
- fermentation, 415

Ruminant

- feeding preferences, trocar sampling, 1003

Salmonella, in

- elephant and rhinoceros, 1006
- wild animals, 270, 304, 503, 929
- wildebeest, 132

Sarcocystis

- histomorphology, 455
- in antelopes, 584
- in buffalo, 61
- in game, 455, 457, 458, 472
- in gazelles, 438, 635
- fine structure, cyst wall, 618

Schistosomes, in (see also Bilharziasis)

- antelope, 719
- baboon, 277, 621, 622
- buffalo, 61
- chimpanzee, 759
- hippopotamus, 614
- impala, 722
- wild animals, 669, 720, 721, 723

Sedation, of

- birds and reptiles, 450, 557
- large animals, 454
- wild animals, 856

Serval cat

- ketamine for, 67
- schistosomes in, 720
- Trichinella in, 670, 908

Setaria, in

- antelopes, 661
- buffalo, 854
- meninges, 59
- zebra, 661, 853

Shigella

- in baboon, 718

Shrews

- bluetongue virus in, 489
- diseases, parasites, 915
- schistosomes in, 720

Sitatunga

- schistosomes, 720
- tuberculosis, 933

Skin

- preparation, 266

Skrjabinea spp.

- in blaesbok, 416

Solar radiation

- adaptation, wild animals, 362

Sparganosis

- in wild herbivores, 226, 1013

Spirochaetal relapsing fever

- role of warthog in, 944

Spirocercia

- in jackals and hyaenas, 114
- in cheetah, 641

Splenectomy

- of duiker, blesbok, 746

Spoonbill

- hepatitis, 518

Springbok

- drug immobilization, 411
- capture myopathy, 301
- haematology, 1032
- heartwater, 661
- tuberculosis, 661

Squirrel

- Leishmania from, 381
- piroplasms in, 380

Starvation

- of wild animals, 394

Steenbok

- contagious ecthyma, 1041
- reproduction, 80, 141

Stephanofilaria

- in skin lesions, rhinoceros, 788, 896, 945

Stilesia, in

- antelopes, 417, 471, 809, 1014

Stork, marabou

- drug immobilization, 740
- Haemoproteus in, 693
- heartworm, 255
- role in Echinococcus transmission, 986

Strobiloestrus

- in wild animals, 473

Strongyloides

- in wild animals, 229, 1041

Taenia

- cysts in antelopes, 661
- in carnivores, 661, 671
- in lion, 228, 1050
- T. solium in baboon, 968
- T. serialis in hare, 661

Temperature, body

- by telemetry, 95

Tetanus

- in waterbuck, 1026

Theileria, in

- buffalo, 44-47, 61, 103, 104, 106, 107, 118, 314, 422, 656-658, 663, 666, 828, 833, 1023
- eland, 335, 437, 1024
- impala, 334, 435
- wild animals, 58, 118, 270, 393, 463, 565, 566, 585, 827
- wildebeest, 118, 119, 745

Thelazia

- in buffalo, 87

Thysanexia sp.

- in antelopes, 661

Ticks

- from wild animals, 218, 270, 401, 413, 932, 1004, 1019
- host encounter relationships, 931
- host selection, 580
- of East Africa, 976
- on genet, 744
- viruses isolated from, 197, 897

Tapi

- carcass values, 548
- drug immobilization, 245, 586
- feed habits, 415
- haematology, 239
- lungworms, 225
- oesophageal fistulation, 953
- rumen fermentation, 415
- schistosomes, 720
- serum chemistry, 239

Toxins in

- lakes, 327
- plants, 306, 637
- tsetse control spraying, 317, 327, 906
- see animals, 285

Toxoplasmosis

- in monkeys, 678
- in wild mammals, 762

Toxascaris sp.

- in hunting dog, 661

Tranquillizers

- in large animals, 411, 454
- for carnivores, 1034

Trapping

- using neck snare, 632
- using plastic sheets, 213, 676
-

Trematodes

- in wild animals, 229, 1014
- in wild birds, 281

Trichinella, in

- bushpig, 429, 670
- carnivores, 271-273, 670, 1058
- hyaena, 815
- lion, 1041, 1054
- rodents, 1041, 1058
- wild animals, 805, 908, 1051

Trichostrongylus sp.

- in wild ruminants, 416, 661

Trichuris

- in giraffe, 576, 661
- in primates, 630

Tropisurus

- in bald ibis, 1041, 1057

Trypanosomes

- ecological effects of control, 681
- effect on cerebrospinal fluid, 179, 181
- effect on serum proteins, 573
- histology of infected wild animals, 568
- immunity in antelopes, 214
- in aardvark, 957
- in bushbuck, 386
- in giraffe, 463
- in hippopotamus, 218, 220
- in impala, 435
- in leopard, 39
- in lion, 38, 39, 218, 219, 812
- in nyala, 84
- in rats, 957
- in reedbuck, 180
- in ruminants, 495
- in ungulates, 496
- in wild animals, 28-30, 40, 42, 96, 120, 137, 178, 184, 214, 243, 244, 283, 297-300, 437, 463, 514, 515, 536, 545, 573, 574, 585, 642, 643, 755, 827, 958, 995, 996, 1024

Tsenesebe

- capture myopathy in, 1047
- schistosomes in, 720
- treatment of locomotory stress in, 363

Tsetse

- and elephants, 284
- control, 156, 918
- control by game slaughter, 440, 537, 570, 784, 842
- general, 268, 269
- host preferences, 156, 533, 536, 909, 919, 958,
989-993
- natural history, 129
- wild animals as hosts, 283, 521, 533

Tuberculosis, in

- addax, 933
- baboon, 934
- buffalo, 337, 940, 1010
- duiker, 594, 661
- eland, 933
- elephant, 308
- fish eagle, 456
- flamingoes, 177, 270, 518
- giraffe, 576, 594, 661
- kudu, 594, 661, 933, 938
- lechwe, 218, 292
- monkeys, 933
- oryx, 933
- rhinoceros, 484
- sitatunga, 933
- springbuck, 661
- wild birds, 270, 823
- wildlife, 585, 686, 1008

Tumors

- carcinoma, squamous cell, buffalo, 61
- fibroma, kudu, 93
- papilloma, cutaneous, 58, 94

Ungulates

- anatomy, behaviour, evolution, distribution, 513
- immobilization, 709

Utilization, of

- buffalo for meat, 1061
- impala for meat, 1062
- wildebeest for meat, 1063
- wildlife for meat, 33, 89, 150, 218, 305, 314, 530,
531, 549, 782, 820, 881, 882, 922, 923, 985

Vaccination

- anthrax, blesbuck, 661
- of free-living game, 364, 1045

Vitamin A

- for skin lesions, rhinoceros, 451

Vulture

- anthrax, 418, 661

- bot fly larvae, crop lesions, in, 176
- digestive tract, 418
- metoidate for handling, 171

Warthog

- African swine fever virus in, 390, 391, 440, 463, 585, 588, 659, 661, 717, 735
- age determination, 97, 151, 781
- Besnoitia in, 483
- breeding, hand rearing, 288
- dentition, growth, 151
- diseases, 425
- foot-and-mouth disease, 373
- growth, 781
- relapsing fever, role in, 944
- reovirus antibody, 639
- reproduction, 157
- schistosomes in, 720
- trichinosis, 20

Waterbuck

- age determination, 901
- bovine herpesvirus 1, antibody to, 302
- Brucella in, 164, 332
- drug immobilization, 354, 486, 864
- ephemeral fever, antibody, 196
- foot-and-mouth disease, 373
- reproduction, 901
- Rift valley fever, antibody, 193
- schistosomes in, 720
- Stilesia in, 809
- tetanus in, 1026
- Toxoplasma, 762

Waterfowl

- botulism, 661

Weights

- estimation methods, 605, 924
- of game animals, 798
- tripod for, 886

Wasselsbron disease

- antibody in buffalo, 1041

Wildebeest

- Anaplasma in, 118, 651
- anthrax, 661
- behaviour, life history, 258
- besnoitiosis, 58, 63, 85
- body temperature, 209
- bovine herpesvirus 1 in, 302, 463, 466, 793, 794

Wildebeest

- Brucella antibodies in, 973
- contagious bovine pleuropneumonia, antibody, 851
- cysticercosis, 143
- drug immobilization, 333
- food habits, 138, 415
- foot-and-mouth disease, experimental, 12
- haematology, 239, 1032

- haematozoa, 110
- heartwater in, 650
- helminths, 502
- lungworms, 225
- malignant catarrhal fever virus in, 463, 585, 620,
726-732, 757, 818
- mange, 1041
- oculovascular myiasis, 55-58, 420
- oesophageal fistulation, 953
- papilloma, cutaneous, 1063
- parasites, 702, 1067
- Rift valley fever, antibody, 193
- ringworm in, 485
- rumen fermentation, 415
- Salmonella in, 132
- semen collection, 982, 984
- serum chemistry, 239
- slaughter for meat, 985, 1063
- Theileria in, 119, 745

Xylazine, in

- antelopes, 888
- birds, 557
- eland, 240
- giraffe, 122
- impala, 240
- rhinoceros, 479
- ungulates, 749
- wild animals, 64, 65, 447, 751, 752, 1022, 1064

Zebra

- African horse sickness, 195, 661, 1041
- age determination, 509, 517, 889, 904
- anaesthesia, 318
- anthrax, 661
- Ascaris, 661
- Babesia in, 111, 211
- body temperature, 209
- care in captivity, 449
- delafondiasis, 612
- Dermatophilus in, 37
- Dictyocaulus arnfieldi, 661
- drug immobilization, 449
- enteroliths in, 205
- food habits, 138
- gestation, 449
- grass sickness, 32
- Habronema spp., 661
- haematology and serum chemistry, 449, 845, 1032
- lungworms, 234
- myopathy, 366, 410, 977
- Oxyuris sp., 661
- parasites, 702, 1067
- physiological parameters, forced exercise, 367
- reovirus antibody, 639
- schistosomes, 720
- Cetaria, 661, 853
- Toxoplasma, 762
- trypanosomiasis, 603

Zoonoses

- in wild animals, 661, 662

